Clinical Lectures
ON
EXCAVATION OF THE LUNG IN PHTHISIS.

Delivered at the Brompton Hospital for Consumption and Diseases of the Chest,

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LECTURE III.

Laennec's views on the healing of cavities—Quiescent cavity—Indications of commencement of arrest of disease—Illustrative case of one-sided cavity—Distinction between hypertrophy and dilatation of lung—Alteration in position of cavities.

GENTLEMEN,—We examined at our last meeting two cases in which the formation of cavities was proceeding with relentless activity to the destruction of the patients. In a goodly proportion of cases, however, the progress of the disease stops, for a time at least, and often for a long time, with the formation of a cavity at one apex; and I showed you one case in which, as far as one can insist upon anything from clinical observation only, a cavity had acutely formed and as rapidly and directly healed, leaving only a cicatricial nodule behind. Laennec believed the healing of such acute cavities or caseous abscesses, as we may call them, to be of frequent occurrence; indeed, he goes so far as to say that it is only after the stage of softening that phthisis is curable. "The pulmonary tubercles," he observes, "differ in no respect from those found in scrofulous glands; and we know that the softening of these latter is frequently followed by a complete cure"; and he adds that the destruction of a part of the substance of the lungs is by no means necessarily mortal. Unfortunately, these caseous abscesses in the lungs are usually multiple; they are, moreover, constantly disturbed by the movements of the lungs, and thus tend rather to extend than to heal.

In chronic cases of phthisis, on the pulmonary disease, after having proceeded to excavation, becoming arrested, a "limiting membrane" is commonly found around the cavity. This membrane, smooth on the cavity surface, is of a tough fibrous or fibro-cartilaginous consistence. It is of variable thickness, but rarely exceeding one-tenth of an inch, and its outer surface is inseparably blended with the lung, from the connective tissue framework of which, and more especially from the sheaths of the vessels and bronchi, it is derived. By its great density—a mere result of connective tissue growth under local irritation—this so-called membrane serves to shut off the cavity from the rest of the lung. It may be represented only by a pale, greyish, often finely interwoven fibrous surface on the internal aspect of the condensed pigmented pulmonary tissue that commonly surrounds old cavities. Cavities, at an early stage of their formation, before all the caseous material has been removed, often become bounded by a limiting membrane; and sometimes we may observe such membranes surrounding caseous nodules, shutting them off from the adjacent lung, and preserving in them, as Rindfleisch points out, a certain low degree of vitality. New vessels are formed in the membrane bounding cavities or caseous collections, and under certain circumstances the internal surfaces of old cavities become extremely vascular and profusely secreting. Cavities thus lined may continue to yield for some time a purulent secretion, which gradually lessens in quantity, and, all active signs of disease elsewhere having abated, the case becomes one of *quiescent cavity*.

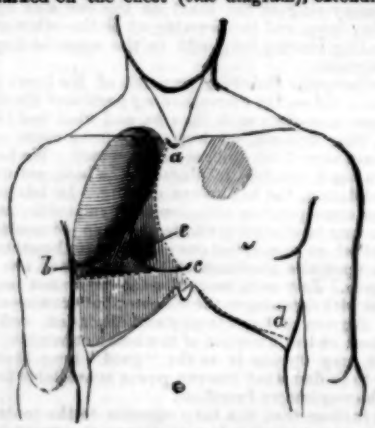
The condensed tissue bounding cavities, whether it take the form of the fibro-cartilaginous limiting membrane described by Laennec or not, is a contractile tissue; and, speaking generally, it may be said that all old cavities—indeed all pulmonary lesions which have ceased to extend and have become bounded by such tissue—undergo contraction.

The signs which indicate the dawn of this period of quiescence and retrogression of cavities in cases of phthisis should be keenly watched for. Whilst yet a certain degree of hectic attendant upon the softening and removal of caseous matters which are beyond recovery or tolerance persists, and whilst the sputa still yield elastic tissue to microscopic observation, the appearance of physical signs which indicate limitation of disease, contraction of its area, and commencing encroachment of neighbouring organs, including that of the opposite lung, may be detected.

I will, in illustration of this important part of my subject, run through the principal clinical features of a case which I will bring before you—features which are in a typical and exaggerated degree those characteristic of arrested disease, and of a disposition to recovery, so far as is possible from such extensive pulmonary destruction.

J. L——, of Liverpool, aged twenty-four, an engineer, unmarried, was admitted into the hospital, under my care, in October last. He has had no previous disease worthy of mention, but he considers his present illness really to have begun seven years ago with night sweats and loss of flesh, but not attended with cough. He has only suffered from cough for two years, and very soon after its commencement he had hæmoptysis to the extent of a quarter of a pint. The cough and expectoration continued bad for nine months after that attack, during which time he had recurrence of the hæmoptysis in small quantity four or five times. The symptoms then abated, but again increased nine months previous to his admission. He has again been on the mend, however, for four months. He complained on admission of some pressure on the right front of the chest, of slight cough and expectoration, and of weakness. The expectoration amounted to about two ounces in the twenty-four hours, consisted of a frothy mucus, and on being carefully examined by my clinical assistant, Mr. Best, no elastic tissue was found in it. I may say that there is no family predisposition to phthisis.

Although spare, the patient is, you observe, by no means noticeably thin. He is somewhat short-breathed, especially on exertion; there is no lividity of surface or extremities, but the finger-ends are clubbed. The chest, naturally well-formed, is contracted and motionless on the right side, expanded and highly mobile on the left. There is decided flattening below the right clavicle. The right semi-circumference two inches above nipple measures 15½ in., left ditto 16½ in; below right nipple, semi-circumference, 15½ in., left ditto, 16 in.; from base of scapular to vertebral spine on the right side, 1¾ in., on left side 2½ in. The maximum impulse of the heart is over the area of a shilling, about an inch within, and half an inch below, the right nipple. On careful palpation and auscultation, however, the apex beat is found to be above and to the right of the ensiform cartilage. There are no morbid heart-sounds. There is good resonance over the whole left side having the limits I have marked on the chest (*vide* diagram), extending, you



will observe, over the whole of the natural cardiac region down to the very margin of the cartilages, and over the whole sternum to beyond its right border. Posteriorly the limits of resonance reach the extreme boundaries of the

chest. The respiratory sounds are healthy and exaggerated, except below the clavicle, where there is some harshness, and there were here a few catarrhal râles which have now disappeared. On the right side in front, external to a line drawn from the junction of the inner and middle third of the clavicle to a little below and outside the nipple, there is almost unbroken cavernous breathing, with pectoriloquy, scanty gurgling, and succussive cough. The percussion sounds over this area, and especially for two or three inches below the clavicle, are dull, but mingled with a certain tubular quality, and tempered by conducted resonance from the other lung. Similar physical signs persist in the scapular region, but below the nipple in the lower axilla, and from about two fingers' breadth below the angle of the scapula downwards, there is marked tonelessness on percussion, with increasingly feeble breath-sound, and a slight dryish crackle occasionally heard. The upper margin of the liver cannot be defined, but its lower border does not extend below the cartilages, and from the position of the heart's apex the liver is evidently drawn upwards considerably.

About the diagnosis of this case there can be little doubt—viz., that it is a case of extensive excavation of the right lung, involving about two-thirds of it; that this cavity has undergone considerable shrinking, and that there is general fibrosis of the rest of the lung. The left lung is, on the other hand, both hypertrophied and dilated in a high degree; there is some remnant of disease now healed in the upper lobe. The heart is healthy, but in an abnormal position.

The history of the case and the auscultatory evidence of positive and extensive destruction and removal of lung prevent us from regarding the signs as being due to a reabsorbed pleuritic effusion. The pleura is, I have no doubt, very greatly thickened and generally adherent on the right side, but by a process secondary to the pulmonary disease.

It is not only the cavity which, by its contraction, has led to all this shrinking of side and encroachment of organs from the left. It is scarcely possible that we should have extensive excavation of the upper part of a lung without more or less disease scattered throughout the rest of the lung, each nodule of which becoming obsolescent according to its degree, we get the lung occupied by numerous cicatricial centres whence extends a fibrosis involving its whole bulk, which, accordingly, shrinks—as this museum specimen illustrates—to one-half or one-third of its natural bulk. As such a lung shrinks it draws inwards the thoracic parietes, upwards the diaphragm, and aside the mediastinum—to all of which it has become firmly adherent.

When a lung thus becomes shrunken its free margins become withdrawn, as it were, into the body of the lung. Thus we have the pericardium often, even at an early period, uncovered on the affected side by the withdrawal of the anterior margin of the lung. This is most strikingly seen in left-sided cases, but in both right- and left-sided cases the uncovering of the heart on the one side by the contracting lung, and the covering up on the other side by the expanding healthy lung, add to the *apparent* displacement of the organ.

Similarly the shrinking upwards of the lower margin of the lung causes the corresponding portion of the diaphragm to come in contact with the ribs, and what had been before deep liver dulness, or deep stomach or colon resonance, becomes superficial dulness or resonance. We have in this case a hand-breadth of dulness at the base, not due to lung consolidation, but to absence of lung. In left-sided cases in the corresponding situation the tympanitic note of the colon may be distinctly elicited on deep percussion.

But let us now direct our attention to the other lung, for it is upon the condition of this lung that our prognosis depends. Just as in heart disease we do not content ourselves with listening to the murmur, but examine all the relative degrees of hypertrophy and dilatation, and the signs of good or bad nutrition of the heart substance, so in one-sided lung disease it is the "good" lung that we must look to to find what reserve power is available for carrying on the respiratory functions.

It is clear that the lung opposite to the contracted side must expand more or less to occupy the space left by the receding heart and mediastinum. But there is a most important difference to be noted between mere *dilatation* and true *hypertrophy* of lung in these cases.

In one-sided chronic disease in people beyond middle-life the comparatively sound lung will dilate, extending, as in the case before us, beyond the sternum, but the breathlessness of the patient remains or is increased; he has only acquired emphysema in addition to his original disease. In young people with a bad family history and wanting in nutritive vigour, the same thing sometimes may be noticed. So far as shape and percussion are concerned, the two sets of cases may be identical. But in the case before us observe the vigorous expansile movements of the left side, note the coarse puerile respiration throughout that lung down to the very margin of the inferior cartilages and across to the right side of the sternum; observe, too, that the patient, in spite of the almost complete destruction of the right lung, does not suffer materially from dyspnœa, nor is there any lividity of the surface or mucous membranes. The case is, in fact, one of true hypertrophy—increased size with increased function—of the left lung compensating for complete disablement of the right lung. Had the left lung been merely dilated, we should have found diminished play of the expanded left side, enfeebled respiratory murmur, increase rather than amendment of the dyspnœa, more or less lividity and œdema of the extremities.

The hypertrophic enlargement, at which an attempt is always made in these cases, is effected by atmospheric pressure compelling the sound lung to fill up the enlarged space, by the desire for aeration of blood leading to increased action of the respiratory muscles on the sound side, and, finally, by the blood shut off in a great degree by occlusion of vessels from the diseased lung being diverted to the healthy side. The pulmonary artery on this side becomes enlarged, and the circulation is further facilitated by the increased movements. Thus an increased blood-supply, if the blood be good and the tissues sound, necessitates increased nutrition—i. e., hypertrophy.

One point more to be noted is that the increased movements on the sound side are almost entirely thoracic.

As regards prognosis, then, in cases of phthisis in which cavity has formed, the signs of shrinking of one lung—flattening, lessened mobility, uncovering of heart, and I may add increased hardness of percussion, associated with signs of enlargement of the opposite lung—resonance encroaching upon the median line and tending to obscure the heart's dulness on that side,—may be taken as sure evidence of chronicity and of a tendency to arrest. If with the enlargement of the comparatively sound lung we get increasingly good breath-sound, the case is in the best way to amendment. These physical signs come on very insidiously, although they often make rapid progress when once the case has become fairly quiescent.

Old apex cavities in the process of contraction tend to remove from their original position, the physical signs of cavity becoming shifted round towards the axillary region, and then sometimes disappearing from the subclavicular region. Dr. C. T. Williams has noticed this fact, and explains it by a general shrinking of the lung to its most fixed point—i. e., towards the root. In some right-sided cases Dr. Williams[1] thinks that the middle lobe of the lung may become expanded upwards, the cavity shrinking in that direction, by virtue of the firm adhesions it has formed at the apex, so as to present in the supra-clavicular and supra-spinous regions. A case of Dr. Tatham's, which he kindly permits me to show you, illustrates this shifting in the position of a cavity, its old position being occupied either by an expanded middle lobe or by the encroachment of the opposite lung, or perhaps by both means. I suspect that the cavities of fibroid phthisis, which present themselves rather towards the middle and outer part of the lung than under the clavicle, are so situated often rather in consequence of this shifting process than from their being originally seated in the central part of the lung.

[1] On the various Modes of Contraction of Cavities in Phthisis. THE LANCET, March 1st and 15th, 1873.

VACCINATION GRANTS.—The following gentlemen have received from the Local Government Board gratuities for successful vaccination:—Mr. Henry W. Newton, Eastern District of the Newcastle-upon-Tyne Union, £75. Mr. Matthew Leach, Sheffield, £85. Dr. J. H. Gordon, Salisbury £31 16s. (second award).

Harveian Lectures
ON
SYPHILIS.

Delivered at the Harveian Society, Dec. 1876,

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LECTURE II.—PART I.

Reinfection with syphilis.—I have spoken of the doctrine that syphilis does not repeat itself in the same individual; that is to say, a man does not have an indurated sore and secondary syphilis more than once in his life. Ricord was the first to enunciate this view, and he did so in very positive terms. At a later period, however, he did not deny the possibility of such a recurrence, and he likened it to the occasional recurrence of small-pox or scarlatina, but said that in all his long experience he had never seen an instance of it. Now, there can be no doubt that a patient does not contract a second indurated sore so long as he is under the influence of the syphilitic diathesis, unless perhaps when he has passed into the tertiary stage. If he is exposed to such contagion, the result is either negative altogether, or a soft suppurating sore is produced, just as has been shown to be the case when an indurated sore is artificially inoculated on a syphilitic patient.

It is a very important practical question whether this immunity is permanent, and will last the patient his life, because upon this depends the question whether syphilis is curable by treatment, or may wear itself out by lapse of time; or whether it is a life-long disease, as many good authorities believe. One distinguished speaker in the late debate expressed his opinion that "syphilis continues to be a constitutional disease throughout the whole life of the man who has it. Syphilis once, syphilis ever; syphilis general, syphilis universal, in the man all the time he lives." This appears to me to be an instance of what Dr. Moxon termed the fallacy of universality, of which in the medical history of syphilis so many examples may be found. I cannot acquiesce in the doctrine, and with great respect for the speaker alluded to, I venture to express the hope, in the words of Dr. Latham, that, as regards this particular point, "he may live long enough to find himself inconveniently confronted with his own maxim."

Probably the opinion may have been strengthened by the impression naturally made on the minds of practitioners by cases of obstinately persistent syphilis, unhappily only too common, in which, spite of all treatment, the disease seems to follow an independent course from one year's end to another; or in which, in the case of married persons, a long series of abortions or of diseased children is the result. But is there not a *per contra*? Does not everyone whose experience is long enough know of patients who had syphilis in their youth, who recovered in due course from all its symptoms, who had no relapse, and who afterwards married and had perfectly healthy children? I myself, looking back over thirty years, can call to mind numbers, not of patients only, but of friends and acquaintances, of whom this has been the history. I therefore strongly deprecate the hopeless view of the case which is conveyed by the expression "Syphilis once, syphilis ever."

The best proof that the syphilitic diathesis can wear itself out is the fact, if it can be demonstrated, that the disease may be contracted a second time by the same person. I have seen what I believe to be unmistakable examples of this, and I fancy most of those who have been long in practice must have seen the same. There are not many instances of a second contagion of true syphilis specially recorded, probably because till recently nobody doubted the fact, and many who now meet with such cases do not appreciate their significance or think it worth while to publish them. Probably, also, they are not very common; for, after a patient has thoroughly got over his first attack, he either marries, or he is very careful about exposing himself to risks of contagion; he is an older and a wiser, if not necessarily a better man.

The Report of the Admiralty Venereal Committee states as follows:—"Of thirty-three witnesses who were asked for their experience whether one attack of true syphilis gives immunity to the individual from a repetition of the disease, twenty-three not only declared it to be their opinion that such was not the case, but several amongst them stated that they had positively seen repeated attacks in the same person, which certainly were not relapses; whilst ten considered that an individual could be the subject of true syphilis only once."

The most recent authority on this point is my late lamented colleague, Mr. Gascoyen. A paper by him was published in the Medico-Chirurgical Transactions for 1875, in which he records eleven cases of re-infection which had come under his own observation. In addition to his own cases he gives in a tabular form sixty others collected from various publications, British and foreign. In thirty-five, constitutional symptoms followed the second contagion; in twenty, indurated chancre alone was the result; in five, an indurated chancre occurred while the patient was still suffering from tertiary disease.

I think, therefore, there is sufficient proof that a second infection with syphilis may take place; and the corollary from this is that the disease may be cured or become extinguished, a result which I fully believe does take place in a very large proportion of cases.

Contagion of secondary syphilis.—The next point to which I have to refer is one of great importance—viz., the contagious quality of the secretions of secondary syphilitic lesions, in the elucidation of which great advances have been made of late years. In former times, and, indeed, soon after the great outbreak of syphilis at the end of the fifteenth century, the disease was supposed to be communicable not only by contact with its secretions in all its stages, but even by the breath of those infected, and very stringent measures were taken for the isolation of the sufferers to prevent its spread. Hunter denied the possibility of this mode of contagion, being led to do so through his having failed to inoculate secondary syphilitic secretions on the patients themselves. In his chapter on "Diseases resembling the Lues Venerea," he describes cases which obviously illustrate the transference of secondary disease from nurse to child, and from child to nurse, but he believed them not to be syphilitic, partly from their history, but mainly because they got well without mercury. At that time, and for long afterwards, mercury was held by many to be the crucial test of syphilis. If it did not cure the disease, the case was not syphilitic; if the disease got well without mercury, it could not have been syphilis. Benjamin Bell did not agree with Hunter's view as to the non-contagious nature of secondary disease, and Hunter's commentator, Babington, who was surgeon to the Lock Hospital, also disputed its accuracy. It was, however, strenuously upheld by Ricord, because he failed to inoculate from secondary lesions on the patients themselves, and it became an article of belief in the profession till about twenty or twenty-five years ago.

But some time before that the fact had been clearly demonstrated by Dr. Wallace, of Dublin. In some admirable lectures published in THE LANCET in 1835, he records five cases in which he inoculated healthy persons successfully from secondary lesions. All five developed indurated sores after a period of incubation, and all had secondary disease. The scientific value of these experiments was very great, although the mode in which it was obtained was no doubt unjustifiable. Dr. Wallace clearly deserves the credit of first re-establishing the fact of the contagion of secondary syphilis, but he must also bear the discredit of having been the first to communicate syphilis wilfully, and for experimental purposes, to healthy persons, they being left in ignorance of the nature of the proceeding. I am not aware that this attracted any hostile notice at the time; but what, I wonder, would happen now if any one of us were rash enough to do the like? It is not long since that a jury awarded heavy damages against an unhappy surgeon who, having contracted a venereal sore on his finger in the prac-

tice of his profession, and being unaware of its real nature, had the misfortune to communicate the infection to one of his patients during childbirth. I presume that anyone who now inoculated a healthy person with syphilis as an experiment, without first fully explaining the probable result, would run the risk of a prosecution for wounding with intent to inflict grievous bodily harm, and imprisonment or even penal servitude might be his portion.

I believe the practice has not been repeated in this country since Dr. Wallace's time. Ricord always very properly denounced it, but other continental practitioners have been less scrupulous, and, at the cost of a number of unhappy victims, a series of valuable facts has been obtained, which confirm those given by Dr. Wallace, and place the question beyond all doubt. Time will not permit me to refer to these in detail; it is sufficient to say that the result, when successful, has uniformly been an induration at the inoculated point after a period of incubation, and secondary affections in due course.

The clinical evidence of the communicability of secondary syphilis is abundant. Mucous patches on the vulva or on the os uteri are probably among the most frequent causes of infection, and similarly in the opposite direction as regards the sexes, but less frequently, the same kind of patches on the glans penis, prepuce, or scrotum. Instances of the infection of healthy children by diseased wet-nurses, and of healthy nurses by suckling diseased children, are familiar to all. In these the contagion, unless under very exceptional circumstances, must have been derived from a secondary source—mucous patches on the mouth of the child or on the nipple of the nurse. Too familiar again are the cases—I have seen numbers of them—of members of our own profession who have contracted disease in ministering to syphilitic patients, especially in midwifery practice. In these latter the poison must have been nearly always from secondary lesions, for the primary affection has usually passed away before the period of parturition.

There are many other less obvious ways which show with what facility and in what circuitous modes this noxious contagion may be disseminated. A drinking vessel, a spoon, or a tobacco-pipe passed from one person to another have all been known to act as vehicles. Men engaged in blowing globes of glass, and who are in the habit of passing the blow-pipe from one to another, have thus been infected, and this so frequently that at some of the glass-works in France it has been found necessary that each man should have a special mouthpiece of his own to receive the blow-pipe. In the Jewish rite of circumcision, in which it is the custom for the operator to take some astringent fluid into his mouth and to suck the wound to arrest bleeding, the contagion has been known to be transmitted to the child. Eustachian catheters, which have been used on patients with secondary patches in the throat, and which have not been properly cleansed, have been known to convey the disease. I have seen one well-marked example of this. I believe also the use of public watercloseets at railway stations or hotels may be a not very unfrequent cause. I know this latter possibility is alleged so often by patients as an excuse that it has come to be received almost with derision, but I see nothing improbable in, we will say, a female with mucous patches on the vulva, or a male with a similar condition of the penis or scrotum, depositing some poisonous secretion, by which the next comer may be contaminated. At all events the knowledge we now possess of the many unexpected and unlikely ways in which syphilis may be conveyed, ought to make us extremely cautious in looking upon the existence of the disease as in itself evidence of immoral conduct. This is a point which, I think, cannot be too strongly insisted upon, and a proper appreciation of it will enable us often to dissipate unfounded suspicions, and to save reputations which, under the old belief, would have been perhaps irreparably damaged. It is better to allow ourselves to be deceived a hundred times by false excuses, than to countenance one unjust imputation.

Contagion by syphilitic blood.—The contagious quality of the blood of syphilitic persons must also now be considered an established fact. In 1850 Dr. Waller, of Prague, inoculated a healthy boy, aged sixteen, with the blood of a woman with secondary syphilis. Five weeks afterwards indurated tubercles appeared at the inoculated points, and a secondary eruption followed. Lancereaux has collected twenty-three cases in which the inoculation of healthy persons with syphilitic blood has been practised. In six the result was the same as that just related—viz., the formation of indurated tubercles locally after an interval of incubation, and subsequent secondary disease. In the remaining seventeen cases the result was negative. The failures, however, cannot invalidate the positive results obtained in the other six cases, which seem to demonstrate beyond doubt that the contagion is present in, and is communicable by, the blood of a person with secondary syphilis. "The life of all his blood is touched corruptibly," although, perhaps, the poison may not exist there in so concentrated a form as in the secondary secretions, as the proportion of failures to inoculate successfully seems to indicate.

Hunter has recorded several cases of disease following the transplantation of teeth, a practice which was common in his time. The transplanted teeth at first became firmly fixed, but at the end of about a month the gums ulcerated, the teeth dropped out, and secondary symptoms followed. Hunter did not look upon these cases as really syphilitic; he describes them while speaking of "diseases resembling lues venerea." Mr. Lee regards them as examples of contagion by diseased blood, but the diseased tissue of the transplanted tooth is, perhaps, even more likely to have been the cause than the blood.

REMARKS ON SOME

CASES OF DISEASE OF THE TESTICLE FOR WHICH CASTRATION WAS PERFORMED.

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(*Concluded from p.* 490.)

THE next case was an example of fibrous degeneration of the testis. It was complicated with hydrocele and an inguinal hernia or bubonocele. There was no reason to suspect that the sac invaded the scrotum. The case derived some interest at the time from the "exaltation" of the patient's mental condition produced by the operation, or rather, perhaps, by the erysipelatoid condition which the wound subsequently assumed. It also illustrated the transient nature of the relief afforded by tapping.

CASE 4. *Fibrous degeneration of the testis; castration; recovery.*—H. F——, aged fifty, was admitted into the London Hospital on March 18th, 1876. In December, 1874, his scrotum began to swell on the left side, and gradually increased in size for two or three weeks, when he had the swelling tapped in the receiving room of the London Hospital, and sixteen ounces of light straw-coloured fluid were drawn off. On the 13th August, 1875, he had it tapped again at Charing-cross Hospital, and eighteen ounces were drawn off. On the 23rd October he had it tapped again at St. Bartholomew's Hospital, and sixteen ounces were drawn off. On the 24th November it was tapped again to the extent of eighteen ounces of fluid. Between the last two tappings his testicle was strapped without benefit. Injection of iodine was not tried, as the testicle was thought to be diseased. Thirty years ago, when at work, he ruptured himself on the left side, but the rupture was not complete. His doctor ordered him a truss, and he had worn one ever since.

On admission, there was an elongated swelling occupying the left half of the scrotum, dull on percussion, and translucent except at the lower and back part, where the testis was situated. The hydrocele was tapped on the 23rd of March, and twenty ounces of straw-coloured fluid were removed. The testis appeared to be enlarged and irregular in outline. I offered to inject the sac with iodine, but the patient had conceived a prejudice against this procedure, from the fact that the measure had not been recommended previously, and preferred castration. This operation, therefore, was performed on the 31st, special care being taken to prevent any descent of the hernia. The cord was divided near the inguinal ring, just above the enlarged tunica vaginalis. The patient had erysipelatous inflammation of the scrotum after the operation. On April 7th he had a severe shivering fit, chills running down "the spine of the

back," followed by profuse perspiration. He felt very ill. His countenance was anxious, his pulse weak and irregular. These symptoms gradually subsided, but on April 10th he became delirious, violent, and quarrelsome. A peculiar manner had been noticed for some days. On the 20th he stated that he died early in the morning, and related what happened to him afterwards.

April 21st.—Skin of scrotum still brawny. Temperature 101° to 103°; pulse weak and quick. Taking little food, and still seeing imaginary spirits.

24th.—The visions continued, and he became very violent when disturbed in the midst of them. Insomnia; rational in the evening.

25th.—Again violent. He was seldom at rest for more than two or three minutes, occasionally whistling a shrill prolonged note, and every now and then spitting violently. A dent was noticed at the back of his head at the junction of the parietal and occipital bones, but he declared that this was given him by the dresser.

The next day he was fed with the stomach-pump, as he refused his food. He continued to ramble, with occasional outbursts. On the 28th he began to eat meat. Whilst he remained in the hospital he continued to talk nonsense. The wound healed on the 8th of May, when his friends removed him. It was ascertained that he had suffered before from mental alienation.

The foregoing account is condensed from the very careful and complete record taken by Mr. Wiles, the dresser to the case.

Examination of the testicle showed a great increase of the fibrous tissue. The mediastiuum and the septa were particularly well marked, whilst the secreting structure was much paler and less abundant than usual. The tunica vaginalis was greatly enlarged, but there was nothing specially to notice about it except that the digital fossa communicated with it by a small opening.

The next case was an example of great increase in the fibrous tissue of the epididymis. It was attended with a pervious state of the processus funicularis, a condition which could not be detected before castration, and led to an unavoidable complication of the operation.

CASE 5. *Fibrous enlargement of the epididymis; patency of the original funicular process of peritoneum; castration; recovery.*—Wm. R——, aged thirty-one, was admitted into the London Hospital on Feb. 12th, 1876. His right testicle had begun to increase in size four years previously, and he experienced a shooting pain at the lower and back part. He was in perfect health at the time, and continued to work until sixteen months before admission. At this time the pain had increased so much that he was obliged to lie up, and intended coming to the hospital, but the pain left him quite suddenly. Three weeks before admission the pain became worse than before, a dragging pain from the groin to the bottom of the scrotum. He was also troubled with pain on micturition, and passed thick urine. His right scrotum was occupied with a large elongated heavy tumour, the anterior part being translucent, evidently consisting of the tunica vaginalis containing serous fluid. He complained of pain across the loins, weakness, and giddiness, and of perspiring freely at night. He was of the so called "strumous" habit, and had been the subject of hip-joint disease.

On the 17th the tunica vaginalis was tapped, and about two ounces of serous fluid was removed. The testicle was found to be irregular in shape, rather hard and bossy on the surface, and the cord was slightly thickened. No hernia or tendency to hernia was detected, and the patient stated that he had never had anything down in his scrotum.

On March 30th castration was performed under ether in the usual manner. The layers of fascia covering the cord were divided transversely, and the cord examined before severance, but without detecting the abnormal condition of the funicular process. The cord was divided as low down as possible at the point where it seemed to be the smallest. On inspecting the divided cord it was found that the original funicular process of peritoneum was not obliterated. The little finger was introduced as far as the external ring to ascertain whether it was pervious above, or whether merely a cyst had been opened. Just at this moment, the patient, coming to from the effects of ether, struggled and coughed, bringing his abdominal muscles strongly into action. A small piece of omentum shot down the canal, and settled the anatomical condition. The omentum was readily returned and retained by compression with the finger. Two catgut sutures were inserted, and a compress applied over the inguinal ring and canal after the scrotal wound had been closed. The patient was ordered to have the thighs flexed on the abdomen and an ice-bag applied.

On the evening of the following day there was a shivering fit, succeeded by a hot and then a sweating stage, the tongue being furred, skin hot, pulse full and rapid, great thirst, &c., without abdominal pain or tenderness. On April 1st he was better, but vomited towards the evening, and complained of pain across the lower part of the abdomen. The dressings were removed, and he was at once relieved. The temperature was 103°. There was some tenderness on pressure on the abdomen during the next few days, but more in the left lumbar region than in the immediate vicinity of the right inguinal canal. The abdomen was quite soft, and free from tympanites. He continued in an unsatisfactory state for some days, the temperature oscillating between 101° and 104°. The scrotum became inflamed, and an abscess formed in the thigh. In spite of these drawbacks, he made progress and recovered well in three or four weeks.

On examination of the testicle, I found that the head of the epididymis was much enlarged, and that the whole of the epididymis was harder than usual. On section, it looked as if the globus major had been converted into a fibrous tumour. Only a small portion of the tunica vaginalis was open; the rest appeared obliterated. Dissection showed that the original canal of peritoneum had been severed just above the point of closure between the external ring and the testicle. The secreting structure of the testis was in much smaller quantity than in a normal organ. Microscopical examination by Mr. Needham showed that the connective tissue between the tubules of the head of the epididymis was greatly hypertrophied, indicating that this body was undergoing fibrous degeneration, and that the vessels and ducts were being compressed by the new tissue. No doubt in a short time the whole of the epididymis would have been converted into fibrous tissue.

Remarks.—The congenital deficiency which this patient exhibited—namely, patency of the funicular portion of the peritoneal pouch occupying the scrotum (the tunica vaginalis having been shut off from it)—could scarcely have been detected before the operation, unless the omentum had descended during his examination in the wards. It is well known that either a part or the whole of the original peritoneal sac may continue pervious, and never manifest itself by protrusion of bowel or omentum; and that a very common history of "congenital" hernia, funicular or vaginal, is, that they occur suddenly during some unwonted effort when the patient has reached maturity. Having asked the patient whether he had ever been ruptured, or had anything down in the scrotum which could be returned, and been answered in the negative, I concluded that the slight thickening of the cord was due to increase of fibrous tissue, and I did not suspect any malformation. But supposing the surgeon does suspect it, and his suspicions are not lulled by the negative results obtained by making his patient stand up and cough, or supposing that he actually discovers a congenital hernia, is he to perform castration? I do not myself for a moment think that the operation need be set aside if the local disease requires it. The surgeon might place a ligature on the open canal of the peritoneum before severing the cord, or tie the cord in two halves, as some recommend. But even if he did not care to adopt either of these precautions, being satisfied to trust to compression over the inguinal canal, he would not have much reason to fear an unfavourable issue. The impression which is derived from the record of cases in which a hernial sac has been unexpectedly opened during castration is, that even that is not a complication attended with special danger; and in the case of congenital patency of the canal of quondam peritoneum the risk would probably be smaller.

The constitutional disturbance which my patient experienced was not due to peritonitis—at least I could not satisfy myself of its existence. The main diagnostic mark of peritonitis pointed out by Mr. Hilton was absent; there was no rigidity of the abdominal muscles and there was no tympanites. Moreover, the tenderness on pressure was chiefly confined to the left lumbar region. The disturbance then I attributed to other causes. My patient was of a "strumous" habit, and his exuretory organs, especially his

kidneys and bowels, did not perform their work efficiently. About this time erysipelas appeared in my wards. It is noteworthy that all three of the last cases of castration had more or less prolonged attacks of shivering and high temperature, systemic disturbance with or without a brawny inflammation of the wound. In the first case operated on, at the beginning of February, the attack lasted only for twenty-four hours. In the other two, operated on two months later, but occupying the same ward as the first, in beds opposite to each other (one was in the same bed as the first patient), the attack was of longer duration. In two of the cases the edges of the wound became brawny, but this erysipelatoid condition did not spread beyond the scrotum. About this time I lost from erysipelas a patient on whom I had operated for spasmodic wry-neck, at the request of Dr. Hughlings Jackson, by excising a portion of his spinal accessory nerve. The wound had nearly healed and the affection appeared to be cured, when erysipelas set in, spread to the face and head, and carried the patient off in about a fortnight. From such risks no operation, especially in hospital practice, is free, even with antiseptic precautions. In his recent work on Surgery, Mr. Holmes speaks of castration as a "very simple one, and free from danger;" but Mr. Curling has shown that there are several points of importance to be attended to, and that there are some special dangers and complications with which the surgeon may meet, and against which he should be forearmed. Association with an undetected hernia, hæmorrhage from retraction of the cord, or secondary into the inguinal canal, may prove both troublesome and fatal. Interesting cases are quoted in Mr. Curling's treatise, and he mentions a case in which erysipelas carried off the patient. Mr. Curling's chapter on castration is one of great value to the practical surgeon.

In conclusion, I would remark that fibrous degeneration of the testicle is probably a frequent cause of hydrocele. Fibrous degeneration may affect either the body of the gland alone, or the epididymis alone, and the latter form may or may not be attended or preceded by the formation of cysts. Fibrous degeneration is not a mere senile change, but may occur in young subjects. Where it begins, whether in the tubes or in the adventitia of the arterioles, I cannot at present state; nor is it of great moment to determine, for the connective-tissue sheath of both arteries and tubes must be regarded as the initial portion of the lymphatic system. Any obstruction in that system must lead to collection of the white corpuscles which pass from the bloodvessels, and to an increased formation, probably, of connective tissue. It is in this direction partly that I should look for an explanation of the so-called "hyaline fibroid" changes so common in the various organs of the body, and I cannot help thinking that the careful study of preparations taken from testicles undergoing similar changes to those which I have here described in an unavoidably imperfect manner might throw some light upon similar changes in another tubular organ, to which the attention of pathologists has been directed of late under circumstances of more than ordinary interest to the profession.

Finsbury-square, E.C.

THE INFLUENCE OF TEMPERATURE ON THE OCCURRENCE OF POMPHOLYX OF THE HANDS.

BY E. WYNDHAM COTTLE, M.A. OXON., F.R.C.S.,
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DURING the hot weather we experienced in the months of July and August of last year my attention was attracted by the unusual number of cases of pompholyx of the hands that came under my observation. During that period of excessive heat, I had eleven patients under treatment for that complaint, some of whom, as the disease runs its usual course in well-marked cases, presented every stage in the development of the disorder, from the first early state, when there exists an inflammatory condition affecting chiefly the sides of the fingers, thumb, and hand, and extending principally to its dorsal surface, accompanied by itching and smarting, with swelling and heat of the affected part; a few papules appear, passing into the vesicular stage, and leading on to the formation of distinct larger-sized vesicles and bullæ filled with serous fluid, the blebs not resulting from the coalescence of several smaller vesicles as so commonly happens in severe eczema in this situation. The bullæ burst, discharge their fluid contents; the cuticle is shed, leaving the hand red and swollen; and the normal condition of parts is restored by the ordinary process of repair, presenting indeed in its progress grades very similar to the stages of exaggerated eczema manuum. In other instances the bullæ were fully formed when they first came under observation, and in others again the early inflammatory condition was not so well-marked, the bullæ being apparently at once produced. In one case, that of a lady, on the index finger of both hands one large bleb extended from the tip of the finger to the metacarpo-phalangeal joint, covering the entire palmar aspect, and encroaching on the dorsal surface of the digits on both borders; smaller bullæ also existed on the palmar face of the second and third fingers, from the tip to the first phalangeal articulation. With this patient there was a history of previous attacks of eczema of the hands following any cause of depression, but on no former occasion had the complaint assumed this form.

In two of the cases the liquid contained in the bullæ was neutral or alkaline; and in all, irritation and heat with excessive perspiration of the part, which was literally poured out, preceded the eruption. All these patients were free from any other skin affection, the rash being entirely confined to the hands; but nine of the eleven were decidedly anæmic and in depressed health. Eight of the cases occurred in females, the remainder in men.

The late Mr. George Nayler alludes to this affection in his work on Diseases of the Skin as an uncommon and curious form of pompholyx, and describes it with his usual accuracy of observation; and it is quite distinct from the "pemphigus foliacé" of the French writers, which may perhaps be more properly regarded as a form of eczema, and with which it should not be confounded, though in the later stages the resemblance is great.

I could trace no particular exciting cause in the above cases, though lately I have seen a nearly similar condition become developed in a lady of delicate health, who, in her anxiety for her children's welfare, had been applying with her hand some remedies I had prescribed for tinea tondens, from which they were suffering; but in this instance it was clearly the result of local irritation.

The only common condition I could find was the unusually high temperature, which lasted from the 20th of June till the 25th of August, within which period these examples occurred. This was a time of most unusually uniform heat, the minimum night temperature from the 20th of June to the end of the month varying from 47° to 61°. In July the minimum nocturnal temperature ranged between 52° and 66°, and from Aug. 1st to the 25th between 47° and 67°. In the daytime, also, this period was distinguished throughout by its unvarying excess of heat, rather than by sudden accessions, with corresponding falls of the thermometer.

From June 20th to Aug. 25th, there came under my care, in private and at the hospital, 564 new cases of cutaneous affections, including these eleven examples of pompholyx manuum, giving a ratio of rather more than 1·95 per cent. In the succeeding like period, Aug. 26th to Oct. 30th, when the weather had become comparatively cold, 473 fresh cases of skin disease passed under my hands, without affording a single example of the complaint in question, which remarkable difference, I think, warrants the inference that the prolonged and unusual heat acted as the exciting cause, setting up morbid processes in unhealthy individuals with defectively nourished tissues, and whose vitality had been depressed by the same cause.

It would be interesting to know whether other observers have remarked a like coincidence in the frequency of the complaint, or whether mine is to be regarded as an accidental experience, and not the usual condition of the occurrence of this relatively rare disease.

Saville-row, W.

ON TAPPING AS A CAUSE OF ROTATION OF THE PEDICLE IN OVARIAN TUMOURS.

BY EDWARD MALINS, M.D.,
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ONE of the most interesting phases in the subject of ovarian pathology is that connected with rotation of the tumour and twisting of its pedicle, accompanied by changes which may take place under such a condition. The following case explains how such changes may be allowed to occur under certain circumstances, and presents a singular aspect in relation to the question of tapping in the presence of a particular condition of the tumour and its surroundings.

Mrs. P——, aged thirty-three, has been married for five years and a half. Had one easy labour a year and a half ago, the child living for a week only. Since this time she has been the subject of a gradually increasing tumour, which was first noticed to commence on the right side, but which has since enlarged so as to occupy the whole of the abdomen. Menstruation has been regular, and the constitutional state of health was always well sustained. This was diagnosed as a large unilocular cyst, with probably no adhesions. The uterus was pressed almost horizontally, and transverse in direction, the fundus being pointed to the left side; it could be moved freely upon the sound, apparently without complication. The case was considered a favourable one for operation, but the patient elected not to undergo any operative measures while her health continued so good.

I lost sight of her for some months, when she sent for me to see her, expressing a wish for an operation to be performed. I visited her on Feb. 16th, when the following condition was present:—She was much more emaciated and feeble, and complained of pain in the abdomen, hips, and back. There was sickness, loss of sleep and appetite; the tongue was red and dry, and there was marked tenderness over the abdomen. The temperature was 101° F.; the pulse 130. The urine, taken by a catheter, was scanty, contained urates, but no albumen.

I hesitated to perform ovariotomy in such a state, and accordingly, on Feb. 18th, I tapped through the abdomen, and took away eight quarts of fluid. This was perfectly clear and limpid, of a pinkish-yellow colour, and serous feel, sp. gr. 1006. The tapping was followed by great relief, the pain subsided, the expression became better, and the appetite returned. The patient came down stairs feeling considerable improvement in her health. A few days after the catamenia appeared, and continued for four or five days without inconvenience.

On March 3rd, a fortnight after the tapping, I proceeded to operate. Ether was given by Mrs. Russell Grant. An incision of about five inches was made in the median line and carefully dissected down to the peritoneum, which was much thickened and vascular; the cyst was found adherent to it anteriorly for a space about the size of the outstretched hand; the adhesions were recent, easily separated, and oozed freely with thick-looking bright-coloured blood. The cyst was flaccid, tough, of a dark, almost bluish-black colour; when punctured, it gave exit to half a pint of fluid like port wine in appearance. It was seized with strong forceps and the finger swept round it; at the upper part it was connected for about three inches with the omentum, and for the same distance with a coil of small intestine, both of which were readily separated. On drawing it gently forwards it was found attached by a long slender pedicle, which was observed to be twisted for two complete turns upon itself, the direction being from within towards the left and over to the right; the part above the twist was discoloured and livid, feeling as if it would give way on the smallest additional force; below it was white and dense. The cyst was throughout of the same mottled dark colour, evidently strangulated by the twisting of its pedicle. A pile clamp was made to embrace the pedicle, and the cyst being cut away at the distance of half an inch, the stump was seared down to the clamp with the thermo-cautery; a silk ligature was tied tightly below the clamp, the ends being cut short; the clamp was then loosened and the stump returned into the abdomen. After clearing away all remains of bleeding, the wound was brought together with silk ligatures and dressed with lint soaked in carbolised oil, the abdomen was padded with cotton-wool, and a bandage applied. In addition to the peritoneum of the anterior abdominal wall being thickened, vascular, and villous in appearance, the surface of the intestines in the neighbourhood of the wound was darker-coloured than usual, had a sticky feel, and an absence of the shining look of a serous membrane.

The patient has done well since the operation, the wound has healed soundly, and she is able to go about with ease, and is in good health.

The cyst was found collapsed and dull; anteriorly there was an oval space of 5½ in. by 3½ in. where it was adherent to the abdominal wall. The shrinking caused opposing surfaces of the exterior to come into contact; these were united by adhesions which could be tracked through easily with the handle of a scalpel. The interior was corrugated and granular; the site of the former tapping could not be discovered; the whole weighed 1 lb. 9 oz. It would appear, therefore, that after the tapping the cyst collapsed and fell back upon the intestines, and that the rotation must have been effected insidiously without any indication of its occurrence during the fortnight which elapsed from the time of its being emptied. The discolouration of its walls, and the changed nature of its contents, showed the result of the compression its vessels underwent from the rotation of the pedicle. The adhesions formed to the parts mentioned were manifestly recent, and point to a remarkable attempt on the part of nature to deal with a cyst the blood-supply of which was cut off, and which was threatening gradually to become a foreign body. The problem to be solved was an eventful one: whether its vitality would have been sufficiently preserved by such adhesions to allow it subsequently to contract, and, being thus transplanted, become inert, or whether, becoming gangrenous, it would have played the part in complications of a more disastrous character, it is difficult to say, though presumptive evidence would favour the former view. The spontaneous recovery of patients with large movable thin-walled cysts after injury or tapping may be explained by the details of this case. That a subacute condition of peritonitis is not a serious obstacle to operation and recovery is also demonstrated, and, in fact, points to the advantage which is sometimes obtained by the greater toleration of parts which seem to have expended already part of the force which is so ready to come into action injuriously when a higher standard of health is present.

Birmingham.

CASE OF EPILEPTIFORM CONVULSIONS IN GENERAL PARALYSIS OF THE INSANE,

WITH LOCALISATION OF DISCHARGING LESIONS.

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A. S——, aged twenty-nine, was admitted into the West Riding Asylum in December, 1874. The patient was a married man without children, and was stated to have suffered from sunstroke three years prior to admission. He remained unconscious for several days succeeding the attack. He has been insane ever since, although he has at times employed himself at his usual occupations. On these occasions he has been irritable and even violent. The history afforded by his friends was scanty in details, but it was positively asserted that his habits had been temperate.

On admission, the patient complained voluntarily of pain in the head, and was anxious for relief. He could not describe the character of the pain, but attributed it to the sunstroke, and said he had never been the same man since that event. On this subject he became emotional. His memory was fairly accurate with regard to most remote and recent events, but much mental confusion became apparent

when he was pressed with questions. He answered correctly most questions with regard to time. He appeared to have no delusions or hallucinations, and showed an utter absence of excitement. He admits his inability to work as usual. Upon physical examination, he was found to be fairly nourished, but his muscles were soft and flabby. There was considerable motor impairment, and his grasp, though fairly strong, was irregular and jerky. There was marked tremor of the facial muscles and great impairment of articulation, which, under the influence of emotions, rendered him quite unintelligible. He always ground his teeth, and there were chewing movements during the whole examination. Locomotion was impaired but slightly, yet, when asked to stand heel to toe, he staggered and stumbled greatly. The pupil was largest on the right side. Tongue protruded straight, but was jerky and tremulous.

The diagnosis made was "general paralysis of the insane."

Shortly after admission, the records of his case state that he remained quiet, childish in manner, and docile in behaviour. His mental symptoms were not so pronounced as his motorial derangements, and the latter were far more marked in—in fact, very exclusively limited to—the muscles of articulation, speech being pre-eminently characteristic of the general paralytic. He was generally depressed, however, rather than exalted. Twelve months subsequently his dementia had become confirmed and rapidly progressive, yet his habits had never been degraded.

Two years after admission he was seized with the first series of convulsive affections which he had ever suffered from. He was walking in the asylum grounds when he suddenly fell down and was very generally convulsed. He was ordered an enema of chloral (forty-five grains). The convulsions were but slightly arrested, and two hours later a second enema of chloral (twenty grains) was administered. The convulsions continued throughout the greater part of the day with occasional intermissions, prostration rapidly advancing. The character of his attack was similar to the epileptiform seizures of general paralytics, and was usually that of a very general discharge; but it was impossible not to be struck by the mode of onset of each attack and the peculiar limited nature of the convulsions at this early period. The flexors and supinators of the left forearm were first affected; the corners of the mouth were next retracted; the lips separated so as to expose the teeth; whilst the mouth was slightly opened by each spasmodic twitch. Frequently a series of such attacks lasted from ten to fifteen minutes without implicating other muscles; at other times the head would be drawn to the left side, the eyes turned strongly downwards and to the left, whilst the right attollens auris could be felt in vigorous action, causing a strong twitching of the ear up and down. On other occasions the convulsions would become general, but a primary implication of the above-named muscles ushered in each series of attacks. The patient eventually died from exhaustion, complicated with pulmonary congestion and œdema.

The following is a short abstract from the post-mortem records. Head: No adhesion of dura mater to skull-cap; pia mater finely injected, especially on the right side over

orbital and second and third frontal convolutions, and on the left side over the third frontal. Very slight opacity of the membranes, and but slight wasting of the frontal lobes. On stripping the brain, adhesions were found over the lower part of the ascending frontal and posterior part of the third frontal of either side. Adhesions of the membranes were also found along the gyrus rectus of the left side and the tips of the temporo-sphenoidal lobes of both hemispheres. The vessels were exceedingly tough, but apparently free from atheroma. No special area of softening on external surface. The grey matter was of fair depth, and pale in both hemispheres, the white matter soft and congested. Nothing special was found on section of the regions corresponding to the adhesions except that on the left side the grey matter subjacent to the adhesions and at the tip of the temporo-sphenoidal lobe had a much deeper colour than elsewhere, and which appeared due to a recent attack of subacute cerebritis. The white matter of the right occipital lobe was most profusely marked with large, coarse vessels. No abnormality was found in the basal ganglia, pons or medulla. Six ounces of bloody fluid escaped on removal of the brain from the sinuses and membranes.

Remarks.

There are several noteworthy features in the foregoing case which will at once attract the reader's attention. There is—1. The mode of onset of the convulsive seizures. 2. The peculiar character of these convulsions. 3. The remarkable symmetry and limitation of adhesions found post mortem.

1. *Mode of onset.*—This has been so strongly insisted upon by Dr. Hughlings Jackson that it would be but futile on my part to dwell upon the subject further than to point out that, had it not been recognised and looked for cautiously, the case might readily have been passed by as one of the usual epileptiform seizures of general paralysis, presenting in the general convulsive discharges but a chaos of motorial derangements, out of which no *localising* symptoms could be gleaned. On attentively watching each successive seizure, however, it was readily apparent that *each attack began with precisely the same phenomena;* and that the convulsions, limited in the first place to the *left arm and hand*, eventually implicated the *facial muscles and the attolens muscle of the ear.* This minor discharge occasionally persisted for ten minutes or more, or spread rapidly so as to implicate the body generally. Usually, however, instead of a general discharge, the peculiar limitation to the left arm and face was supplemented, on increased severity of the convulsion, by turning of the face and eyes to the left side, the latter being also drawn strongly downwards. This mode of onset therefore pointed directly to a discharge from grey matter from convolutions in the neighbourhood of the right corpus striatum.

2. *The peculiar character of the convulsive onset.*—The movements of the arm were purely those of supination and flexion, performed with jerky irregular action. The movements around the mouth were peculiar, and strongly reminded one of the movements of the lips in animals about to snap when the canines are exposed by the retracted lips. The teeth were being constantly uncovered by these movements, and the corner of the mouth at the same time elevated and retracted by the zygomatici. The jaws were also slightly separated consentaneously with the above movements, but no movement of the tongue could be detected. Now it will be remembered that Prof. Ferrier has definitely placed the centres whereby these movements are produced in close proximity to each other. A region is thus marked out occupying the lower portion of the ascending frontal, where the second and third frontal gyri impinge upon it. The various motor centres occupying this area in the right hemisphere when stimulated produce the various movements which characterised the onset of our patient's attacks, and were regarded by myself as the seat of the discharging lesion, on the ground that the movements around the mouth are by stimulation of either hemisphere *bilaterally* reproduced.[1] The pricking of the ear was very marked, and occurred only when by the spread of convulsions the head and eyes were drawn to the left side, but the twitchings were limited strangely to the *right* ear.

3. *The symmetry and limitation of adhesions.*—The area of adhesions between the pia mater and cortex, and the subjacent inflammatory blush, clearly and indisputably embraced that portion of the ascending frontal figured in Professor Ferrier's work as (6, 7, 8, 9) in Fig. 63, and, with the exception of the tips of the temporo-sphenoidal lobes and the left gyrus rectus, no suspicion of the slightest adhesion elsewhere could be entertained; even in the line

[1] Dr. Ferrier: The Functions of the Brain, p. 143.

usually occupied by the Pacchionian bodies the pia mater was most readily stripped off. The symmetrical distribution of these adhesions on either side was most marked, the one being the exact counterpart of the other. The mode of onset, however, sufficed to indicate which hemisphere was the discharging one, and together with this I took into consideration a fact which has lately attracted my attention greatly. I refer to the pupil of the right eye being far more widely dilated than the left. I have endeavoured elsewhere to show that this dilatation of the pupil is frequently a *localising* symptom; and in the present instance I regarded the dilatation as distinctly pointing to a discharging lesion of the right hemisphere, which the subsequent phenomena and appearances confirmed. The posterior half of the right hemisphere was notably softened, the white matter congested, and the number and coarseness of the vessels, especially in the occipital lobe, greater than I have ever before observed. This was certainly not the case in the opposite hemisphere, and is worthy of note as Dr. Hughlings Jackson has frequently insisted upon the more pronounced dementia attending lesions of the posterior portion of the right hemisphere.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

ST. BARTHOLOMEW'S HOSPITAL.

MALIGNANT DISEASE OF THE ŒSOPHAGUS; GASTROSTOMY; DEATH.

(Under the care of Mr. CALLENDER.)

THE value of the subjoined record—for which we are indebted to Mr. C. B. Gabb, dresser—is not in any degree diminished by the fact that the operation of gastrostomy was not successful. The advocates of this operative procedure may justly urge that, although at the time when the operation was performed the case appeared to be in every respect suitable, the amount of mischief, as shown at the post-mortem examination, was so great as to render recovery impossible. The operation has proved permanently successful with M. Verneuil, of Paris (see the "Mirror" of Jan. 6th last), and was practically so in a case recorded in our "Mirror" of May 15th, 1875, under the care of Mr. Sydney Jones.

Robert B——, aged thirty-nine, a coach-painter, whose general health had always been good, was admitted on the 16th of October, 1876. He first noticed a difficulty in swallowing about February, and since Aug. 12th he had been quite unable to swallow solid food. There was no history of his having taken any corrosive. He had never vomited blood. A small bougie had been passed twice a week for two months before his admission, and on the last two occasions some blood had followed the removal of the instrument. The family history was good. The patient had lost flesh rapidly, for in health his average weight had been 12 st.; three days after admission he weighed 8 st. 4 lb. No tumour or enlarged glands could be discovered in the thorax. The patient was much troubled with a cough, and he had frequent pains at the pit of the stomach.

Oct. 17th.—A No. 9 bougie was passed into the œsophagus for about twelve inches, when it met an obstruction. No force was used, and the instrument was withdrawn without having entered the stomach. He was ordered to have twice a day an enema consisting of two ounces of brandy, three eggs, and half a pint of essence of beef.

Oct. 18th.—The physical examination of the chest disclosed nothing abnormal. A bougie was passed, and, according to the patient, went through the stricture. Pulse 50; temperature and respiration normal. Two days later a bougie was used, which did not pass the stricture, but on the 24th a No. 8 bougie was passed, and again on the 26th; both times it was supposed to have gone through the stricture, for the patient was able to swallow better for the next twenty-four hours. An abortive attempt was made on Oct. 29th; this was the last time any instrument was used. On Oct. 26th he was weighed, and had lost 2 lb. in a week. His cough became very troublesome. He expectorated large quantities of muco-purulent sputa containing more or less blood. There was considerable pain at the pit of the stomach, which was also felt in the right scapular region. His pupils were unequal, the right being the larger.

31st.—He swallowed part of a sole, the last food he took by the mouth. He threw up three tablespoonfuls of blood. He was ordered four enemata a day, instead of two, as before. These were given fairly hot. He was able to retain them, and seldom had more than one action of the bowels in twenty-four hours. A consultation was held, at which the majority of the surgical staff were present. The opinion was unanimous that the nature of the stricture was malignant. It was also thought to be a favourable case for the operation of gastrostomy. The patient was again weighed on Nov. 3rd, and was found to have lost 8 lb. 12 oz. in a week. He gave his hearty concurrence to the proposed operation. On Nov. 4th he vomited two teaspoonfuls of blood. The abdominal pain was less. Urine scanty, sp. gr. 1038, free from albumen and sugar; cough urgent.

On November 6th he was quite cheerful, and had had a good night. There was no pain except on coughing. Bowels open. Tongue dry and furred. Pulse 64; temperature and respiration normal. He had been without food by the mouth for seven days. Two enemata were administered during the morning. One-sixth of a grain of acetate of morphia was given hypodermically at 1.15 P.M. At 2 P.M. the patient was placed under the influence of nitrous-oxide gas and ether. Mr. Callender then made the usual incisions, and the peritoneal sac was opened. The great omentum and the edge of the left lobe of the liver presented themselves. The stomach was easily found, and having been drawn down, was stitched with some silver sutures, to the anterior wall of the abdomen. The stomach was then opened (no blood having been allowed to pass into the peritoneal cavity, all bleeding having been carefully stopped as the operation was being proceeded with), and the cut edges of the stomach were then secured to the margins of the abdominal section by eight silver sutures. No evidence of disease could be recognised when the finger was introduced into the stomach. An indiarubber tube three inches long and one-third of an inch in diameter was placed in the viscus and fastened there. The wound was dressed with carbolised oiled lint. The patient was eighty minutes under the anæsthetic, owing to the time given to the prevention of bleeding. Pulse 76, small and regular. At 5.30 P.M. an enema, and at 9 P.M. a hypodermic injection of one-sixth of a grain of morphia were given. At 10.15 P.M. the dressings were changed and the tube removed, as it seemed to be causing irritation. The discharge was copious, consisting of a dark bilious-looking material mixed with a thin reddish fluid; the reaction was acid. Pulse 80, strong and regular; temperature 99·6°. He had not passed water.

Nov. 7th.—He had about four hours' sleep during the night. The wound was dressed at 2.30 and 9.30 P.M. A hypodermic injection of a sixth of a grain of morphia was given each time. Cough troublesome, and he expectorated a large quantity of muco-purulent fluid, free from blood. He passed water at 7 A.M., and complained of much scalding in doing so. Urine very scanty, specific gravity 1035, highly acid. With the exception of feeling faint at times, the man expressed himself as being very comfortable. There was no abdominal tenderness. The tongue rather dry, and coated with a brownish fur. At 3 P.M. the dressings were again changed, and the edges of the wound smeared with oil (this was done each time the wound was dressed). About three ounces of warm milk was passed through a small tube into the stomach, most of which, however, ran out. Pulse 112; temperature 99·6°; respiration 28. At 4.30 P.M. an enema of one-sixth of a grain of morphia was given; 10 P.M. the bowels had been open, and he had been dozing since 6 o'clock; the dressings were changed and an enema given. The wound looked red at the lower margin, where it was probably irritated by the discharge. Pulse 100, less strong; temperature 99·4°; respiration 28.

8th.—2 A.M.: His bowels had been open twice. He

felt unable to retain an enema. One-sixth of a grain of morphia was given hypodermically; at 9.30 A.M. the wound was dressed and an enema given. The patient had slept four hours during the night; there was no abdominal tenderness; he felt better, but looked more sallow. Tongue dry, but less furred than it had been. Pulse 96, small and regular; temperature 99°; respiration 24. At 2.30 P.M. seven drachms of warm milk and the yelk of an egg mixed with it were passed into the stomach through the tube as before, and were apparently retained; at 5 P.M. this was repeated, together with an enema; both were again given at midnight. Each time the food remained in the stomach. The wound was dressed at 2.30 P.M., and at midnight. The lower part was now much excoriated by discharge, despite the precautions taken. The man complained much of thirst and giddiness. There was no abdominal tenderness. The morphia was repeated.

9th.—The patient felt much weaker, and had a good deal of pain all over the abdomen. He was fed through the wound at 9 A.M., and had an enema at noon. He complained of thirst, and the cough was troublesome, but the latter was relieved by chewing tobacco. He slightly wandered in his talk during the morning. His face was much more sallow and the cheeks sunken. Tongue dry and thickly furred. Lips pale. At 2 P.M. the stomach was washed out with warm carbolic acid, 1 part in 70, to get rid of the copious discharge from its mucous surface; after this he was fed as before, but almost all the nourishment was returned. Morphia was again given, and repeated at 3.30. Pulse 100, small and regular; temperature 98·6°; respiration 32, abdominal. At 5.30 P.M. he was fed, a teaspoonful of brandy being added to the milk and egg, most of which was retained. He had been sleeping since the last dose of morphia. He seemed stronger, but wandered in his talk. At 10 P.M. he had been sleeping. He was again fed. Pulse 102; temperature 97°. The muscles of mastication acted on this and other occasions when food was introduced into the stomach.

10th.—Morphia was given as before, and he was fed at 2 A.M. Pulse 100, irregular. At 5.30 A.M. he was much weaker, and had been sleeping. His extremities were cold. Said he was not in pain. Pulse 108, very small and irregular; respiration 38. The wound was dressed, and he was fed as before. At 8.45 he was fed, two teaspoonfuls of brandy being added, when he revived somewhat, but was greatly exhausted. No pulse could be felt at the wrist. He seemed in no pain. At 10.30 A.M. he died suddenly, having lived ninety-one hours after the operation.

The post-mortem examination was made twenty-seven hours after death. The body was much emaciated. The œsophagus having been taken out, there was found an ulcerated stricture, involving the whole calibre of the tube, in the lower third, a little over two inches in length, and ending about one inch above the cardiac opening of the stomach. The following is the surgical registrar's description of the parts:—"The base of the ulcer was ragged and sloughing, with little induration. The disease had extended through the anterior part of the wall, and had involved the pericardium, which, all along the base of the heart, was adherent. The upper border of the ulcer was formed of hard and slightly nodulated mucous membrane, raised and slightly everted. The lower margin was less characteristic." The pericardium was implicated to such an extent that on its removal a large hole was made in the œsophagus. There was general peritonitis, most marked in the upper part of the abdomen, but no increase of fluid. The great omentum was quite devoid of fat. The liver was cirrhosed and fatty (the man had been a hard drinker.) Lungs, kidneys, stomach, and intestines healthy. A soft, spherical, caseous mass, of the size of a largish marble, was found in the right suprarenal body.

It is a curious fact that this patient had, all his life, the power of regurgitating his food at will, an accomplishment of which he made frequent use.

KENDAL HOSPITAL.

EXCISION OF THE KNEE-JOINT.

(Under the care of Mr. WALTER ILIFFE.)

A CASE of successful excision of the knee-joint performed by Mr. Iliffe in Warwickshire was inadvertently recorded in the "Mirror" of March 10th as a hospital case.

Mary K——, aged seven, an inmate of the Orphanage Institution, Kendal, had for many months been afflicted with disease of the knee-joint. Mr. Iliffe, who was asked by the late Dr. Green to examine the joint, found the condition of the limb to be as follows: the condyles of the femur were very much enlarged, almost twice the normal size; the limb had assumed a bent position from displacement of articulation; it was bent forwards almost from an obtuse to a right angle; there were four sinuses below the patella, at considerable distances from each other; and a small abscess had been discharging for some months between the external hamstring tendons and the popliteal space. The child had been hobbling about in this condition for nearly eighteen months, and it had all but been decided to amputate the limb. The general condition of the patient was unfavourable for an operation of any kind. The child was scrofulous, and the disease appeared quite active. There was considerable enlargement of the lymphatic glands, and the back of the head had broken out with an obstinate eruption; the frame was ill-nourished, the tongue foul, and obstinate diarrhœa had more than once given cause for anxiety. At the request of Dr. Green the girl was conveyed to Kendal Hospital. The leg was dressed every morning antiseptically, free passage being given to the discharge by means of drainage-tubes after the method introduced by Mr. Lister. Half-drachm doses of the syrup of iodide of iron were given twice daily, together with cod-liver oil emulsion; and the scalp eruption was treated with an ointment consisting of equal parts of the nitrate of mercury ointment and carbolic acid ointment. In three weeks the general condition of the child had wonderfully improved, so much so that Mr. Iliffe decided to excise the joint; and this operation was performed in February, 1876, with an eminently gratifying result.

The case turned out to be chronic periostitis with the formation of several abscesses, the largest of which was bound down beneath the popliteal fascia; the cancellous tissue of the femur was somewhat infiltrated with pus, and there was a great deal of congestion, necessitating the free use of the gouge. The articular cartilage was thoroughly disorganised, the periosteum was immensely swollen, and the whole joint in a hopeless condition. The operation was performed as in the former case, with the valuable assistance of Mr. Hartridge and Dr. Burt. The limb was put up in a box with a foot piece, and the case treated antiseptically, by means of the self-acting spray.

There was a great deal of trouble in the after-treatment; the wound remained indolent and quaggy, the child restless and excitable; but improvement came at last, and in the tenth week rapid progress of union commenced. The child has long been convalescent, in possession of a sound, strong, and healthy limb, shorter only by two inches than its fellow of the opposite side. When she was discharged from the hospital she returned to her home at the Orphanage, where she has grown rosy and fat, and is now walking about very satisfactorily.

WEST SUSSEX INFIRMARY, CHICHESTER.

A CASE OF STRANGULATED INGUINAL HERNIA; SECOND OPERATION SUCCESSFUL.

(Under the care of Mr. FREELAND.)

FOR the following notes we are indebted to Mr. G. Gordon Sparrow, house-surgeon.

W. K——, aged thirty-six, admitted Oct. 16th, 1875, suffering from strangulated inguinal hernia on the right side. Taxis was performed, but without avail; the symptoms of strangulation became more marked, and herniotomy was successfully performed, the patient being discharged cured seventeen days after the operation.

He was readmitted on December 17th, 1876, suffering from the same complaint. He had always worn a truss since last operation, even in bed. On the night of the 16th, however, the truss slipped, and he was awakened by great pain in the abdomen; he found that the hernia had descended into the scrotum, and he was unable to return it. When he was brought to the infirmary he was placed in a warm bath; taxis was performed, but without any favourable result. Two grains of opium and two turpentine enemata were administered within three hours, but the

bowels were not moved. As the symptoms were not urgent, the patient only vomiting occasionally, and the pulse being slow and the tongue moist, hot fomentations were applied to the tumour, and half a grain each of calomel and opium given every four hours. Patient passed a tolerably good night, and appeared to be much relieved.

On the morning of the 18th the tumour was less tense, smaller in size, and not so tender; the vomiting was less frequent. Pulse 60; temperature 99° F. On the same evening the symptoms of strangulation became more marked, stercoraceous vomiting and hiccough setting in; the tumour became tense and tender, and the countenance haggard. Herniotomy was performed by Mr. Freeland, who made an incision two inches in length along the direction of the canal, carefully dividing the structures in the usual manner. On opening the sac a quantity of turbid serum escaped. The strangulated portion of the gut was examined and found to be in a very congested condition. The stricture with the old adhesions which presented themselves were divided, and the bowel returned; the wound was brought together by silk sutures and dressed with a large pad of dry lint and bandage, over this some lint saturated with carbolic acid lotion (1 to 40).

Dec. 19th.—Patient doing well; complains of slight tenderness over right iliac region. Pulse 70; temperature 100°.

20th.—Pulse and temperature normal. Takes beef-tea and milk readily.

21st.—Bowels opened for the first time since operation. Pulse and temperature continue normal. Wound examined and dressed with dry lint and carbolic acid lotion as before.

22nd.—The edges of the wound having united, the sutures were removed. Patient complains of very little pain in abdomen.

23rd.—Wound completely healed.

25th.—Patient allowed meat diet.

Jan. 6th, 1877.—Patient allowed to get up with a properly fitting truss.

16th.—Discharged cured.

This case is of special interest in consequence of recovery from a second operation, and the rapidity with which the wound healed, without the slightest appearance of suppuration.

Medical Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

THE ordinary meeting of this Society was held on the 10th inst.; the President, Dr. C. West, occupying the chair. Only one paper was read—viz., one by Mr. Holmes on a case of punctured wound in the back, in which it appeared probable that the ureter was wounded. The characters of the fluid escaping from the wound differed to a curious extent from those of normal urine, but at the same time they differed also from fluid derived from other suggested sources—e. g., the peritoneum or spinal canal. The following is a brief abstract of the paper.

"On Direct Wounds of the Ureter," by T. HOLMES, F.R.C.S. The communication described a case in which it was thought probable that the ureter was punctured from behind by a stab-wound, implicating no other structure of importance. The injury occurred to a boy, who was accidentally stabbed by a playmate. The wound was a very small one, and bled but little. Immediately on the cessation of the hæmorrhage, a copious flow of clear fluid was seen to proceed from the puncture, and this continued for a fortnight, in quantity sufficient to soak three large drawsheets in the course of the day. The composition of the fluid was extremely different from that of normal urine; but it differed also from that of the cerebro-spinal fluid, which seemed to be the only other secretion that could have been evacuated by a puncture of this kind; nor did the symptoms point to any lesion of the spinal membrane or nerves; while the urinary secretion was much altered in quantity and quality from the date of the injury. Various arguments were adduced to prove that the lesion in this case was really a direct wound of the ureter—an injury not hitherto treated of in our surgical works, though direct wounds of the kidney have been carefully described. The possibility of the occurrence was illustrated by a preparation made on the dead subject, which accompanied the paper.

Mr. THOMAS SMITH thought the opinion that the ureter was wounded was based on insufficient grounds. Mr. Holmes further only considered the alternative of the fluid that escaped from the wound being either urine or cerebro-spinal fluid, but it might have come from the peritoneal cavity. The analysis of the fluid seemed to show that it certainly was not urine, and, apart from this, even if the ureter were wounded it would be very improbable that the urine should find its way out through the wound, rather than into the loose cellular tissue around. The fluid not being urine, the ureter could not have been wounded. The large quantity of fluid poured out was not incompatible with its derivation from the peritoneal sac.—Mr. HOWSE had a case now under his care which seemed to lend support to Mr. Holmes's view. It was that of a lad about fifteen years of age, who sustained a fracture of the ilium from being run over, a wheel passing across the abdomen. There was much bruising and collapse at first, and after some time a swelling appeared in the left flank, unattended by any constitutional disturbance; on tapping, three or four pints of clear fluid escaped, having all the characters of urine, and the puncture was allowed to close up. The fluid reaccumulated, and was again evacuated, and ever since (a period of eight or nine weeks) the tapping has been repeated about once a week, the amount of fluid withdrawn diminishing. The fluid is undoubtedly urine, but it contains less urea and is of lower specific gravity than that which comes from the patient's bladder. In Mr. Holmes's case the lowness of the specific gravity pointed against the fluid being derived from the peritoneum. Mr. Howse added that in a case of spina bifida, which he tapped with a view to apply pressure, the cerebro-spinal fluid drained away owing to displacement of the pad, and this escape of fluid was accompanied by a train of well-marked nervous systems.—Mr. T. SMITH pointed out that in Mr. Howse's case the fluid contained urea always, whereas in Mr. Holmes's urea was frequently absent.—Mr. DEBOUT, who spoke in French, related the case of a patient in whom a renal calculus had led to the establishment of a fistula in the loin, which remained long patent.—Mr. BARWELL remarked upon the great differences present in the chemical analysis of the fluid escaping from the wound and the urine. He considered that the peritoneum would be more easily wounded than the ureter, which lies in loose tissue, and, like a bloodvessel, might easily escape from the knife. He had at present under his care a patient in whom a stab in the arm passed just between the biceps tendon and the brachial artery. To travel through the back to reach the ureter the blade of the knife must be of considerable length. The quality of the fluid, however, presented the greatest difficulty, and he thought that of the three hypotheses as to its source that attributing it to a wound of the ureter was the least probable. He had had two cases of spina bifida under his care, in which draining away of the cerebro-spinal fluid in large quantities had been followed by no nervous symptoms.—Mr. RIVINGTON said that he also was struck with the omission in the paper of any mention of the peritoneum as a possible source for the fluid. He might add to the reasons already put forward against the uretral hypothesis that some of the urine would certainly have been effused into the cellular tissue. He had noticed a large quantity of fluid escape from the peritoneal cavity from a small wound left after colotomy. The amount of albumen in peritoneal fluid varies exceedingly, so that its absence in Mr. Holmes's case did not tell against the view that it was the peritoneum that was wounded, and not the ureter.—Mr. HOWSE asked if there was any case known in which fluid from the peritoneal sac was of such low specific gravity as the fluid escaping in Mr. Holmes's case.—Mr. RIVINGTON said the fluid from the healthy peritoneum was never examined.—Mr. HOWSE doubted if the peritoneum could be considered healthy where so much fluid was passed out.—Mr. G. POLLOCK asked if the specific gravity of the fluid obtained from the wound was compared with that which escaped from the bladder. The increased flow of urine from the bladder following on closure of the wound might be due to

an arrest of drainage, from whatever source. If the urine from the bladder were of higher specific gravity than that from the wound, the latter could hardly have implicated the ureter, for why should the secretion of one kidney be of higher specific gravity than that from the other? He was, therefore, inclined to believe with Mr. Smith that the peritoneum was wounded, and not the ureter.—Dr. J. HARLEY (the hon. sec.) read an extract from the paper to the effect that whereas the fluid escaping from the wound was of a sp. gr. 1008, with but little variation, the urine from the bladder ranged from 1015 to 1033. He himself suggested that, granting Mr. Holmes's hypothesis, the urine escaping from the divided ureter might, in its passage, be diluted with serous fluid from the irritated tissues. The first quantity collected decidedly contained urea, but subsequently only faint traces of this constituent could be found. —Mr. HOLMES, in reply, said that he did not wish to dogmatise on the subject, and he had only put forward what seemed to him the most probable explanation of the case. The idea that the fluid might have come from the peritoneal cavity certainly suggested itself to his mind whilst the case was under observation, but he could see no reason for accepting that view. The fluid in this case contained no albumen, and this of itself negatived its peritoneal source. The continuous outflow of the fluid, which was in as great quantity immediately after the accident as it was a week later, showed that it could only come from a source where an unintermitting secretion was going on. With regard to Mr. Barwell's statement, he did not think it likely the ureter could have escaped as suggested, and certainly that tube was nearer to the surface (from the back) than the peritoneum was. The knife was a long-bladed one, and he had found from experiment that a wound inflicted as stated would reach the ureter. Mr. Howse's case showed that the urine proceeding directly from the ureter and kidney may contain less urea than that passed per urethram. In his own case, the contrast between the fluid passed from the wound and the urine was very remarkable. He thanked M. Debout for his interesting case of discharge from the ureter connected with passage of a stone internally; but the fluid had not been examined in that case. Direct wounds of the ureter are not mentioned by Simon, but Mr. Holmes desired to place this case on record as a contribution to the subject, believing that if the fluid did not come from the urinary tract, it must have come from the spinal membranes.

The Society then adjourned.

Reviews and Notices of Books.

A Treatise on the Theory and Practice of Medicine. By JOHN SYER BRISTOWE, M D. Lond., F.R.C.P. London: Smith, Elder, and Co. 1876.

THIS work is an important and welcome addition to medical literature. It is of value as containing the well-matured convictions of a highly-cultured physician. There is no evidence of haste in its construction and composition; it is precise, orderly in method, and, moreover, thorough and exhaustive in range. There is, too, a freshness and vigour in the style which add greatly to the pleasure derived from the perusal of the book.

Beyond these individual characters this work contains many novel points in a text-book of medicine, which go far to raise it above the general level of such works. For instance, in the sections treating of local diseases, the morbid conditions are preceded by a brief but lucid account of the anatomy and physiology of the organs in question. Thus the section on diseases of the respiratory organs commences with the anatomical relations of the larynx, trachea, bronchi, and lungs. Diseases of the heart are introduced not only by anatomical details, but by a sketch of the physiology of the organ and the phenomena of the pulse; whilst the most important part of the work, that which treats of diseases of the nervous system, is prefaced by a lengthy and exact description of the structure and functions of the brain and spinal cord.

Another innovation is to be found in the introductory chapters on general pathology, where a summary of the characters of new growths finds a prominent place. Indeed the work is, as may be expected from one so versed in pathology as its author, remarkable for the breadth and precision with which pathology is treated; and it is a good sign to find that it is deemed as essential in a text-book of medicine to give instruction in the varieties of morbid growths as it is in a surgical text-book. This portion of the book appears, however, to lack one thing, which we may hope to find present in a second edition of the work—viz., illustrations. Their utility, nay, their obvious necessity, for the comprehension of histological descriptions is so fully recognised, that we should be glad to find that in this respect also the text-books of surgery were no longer allowed to enjoy a monopoly. Indeed, the value of the whole book would be greatly enhanced if illustrations of morbid or even normal anatomical structures were freely distributed throughout its pages. The admirable description of the cerebral convolutions, for instance, would be greatly improved by such an addition.

If we now pass to the body of the work we find but little that calls for special comment. Therapeutics are allowed their just place, but Dr. Bristowe is cautious in limiting the range of the efficacy of drugs, and he is to be commended for not overloading this part of the work with needless details. As an instance of the all-embracing character of the book, we may mention that it contains sections on rotheln, dengue, and leprosy among the general diseases. Dr. Bristowe boldly declares his view of the relations of membranous croup and diphtheria by describing them under the one head of the latter disease. With regard to tracheotomy in this affection, he prudently declines laying down any specific rules for its performance, but remarks that it is better to perform it too early than too late.

The section on diseases of the skin is admirable. Erysipelas is treated here, the author, after discussing the arguments for and against the view as to its being a specific affection, concluding, with Hebra, that it is not a specific affection, but a local disease "in the same sense as inflammations of the lungs and of other organs are local diseases." And when we remember that conversely a fairly good case might be made out for pneumonia to be considered one of the acute specifics, we may accept this statement as the best for the time. Following the introductory chapter on the anatomy of the organs of respiration are sections upon the pathology of voice, respiration, cough, and expectoration; and in the pages that follow upon the physical examination of the chest there is less of the attempted over-refinement, that super-subtlety of discrimination, than is generally met with in text-books of this class. After discussing diseases of the circulatory organs, Dr. Bristowe passes to affections of the ductless glands and blood, commencing with goitre and cretinism; diseases of the spleen, supra-renal capsules, and of the lymphatics, interpolating here a description of leucocythæmia, which he allies intimately to lymphadenoma. "The treatment of lymphadenoma, whether attended or not with leukæmia, is, like that of carcinoma, altogether beyond the resources of our art. We can only relieve symptoms as they arise, and promote the health of the patient by attention to diet and by hygienic management." These few words sum up the experience of all physicians, now that the phosphorus bubble is burst. Anæmia, purpura, scurvy, alcoholism, and chronic lead- and mercurial-poisoning, complete the somewhat heterogeneous group of blood diseases.

Noticing that the author prefers to treat together all forms of hepatitis, which he groups under four divisions—viz., congestive or inflammatory, inflammation of ducts,

suppuration, and cirrhosis—we may pass over the section on diseases of the digestive system, to that which treats of the urinary organs. This is preceded by an account of the urine in health and disease, including a description of the varieties of urinary calculi. The "specific consequences of the retention of urea and other such matters in the blood" form an interesting subject preliminary to the description of urinary derangements in particular. In describing the thickening and constriction of the smaller bloodvessels, Dr. Bristowe states he is disposed to concur in the views maintained by Sir W. Gull and Dr. Sutton, that the thickening "is the result, not of muscular hypertrophy, but of a hyaline-fibroid conversion; that it is, in fact, a change not unlike that which occurs in cirrhosis of the liver and sclerosis of other organs,—a change which, in a sense, may be regarded as degenerative." Diabetes is dealt with in this section, and in quoting Dr. Donkin's skim-milk treatment the author admits that patients may gain flesh and strength after its use, and that the urine diminishes in quantity, in density, and in the amount of sugar it contains. Rheumatism, gout, rickets, and pseudo-hypertrophic paralysis are dealt with under the head of diseases of the organs of locomotion.

Undoubtedly the most complete section is the last—viz., on diseases of the nervous system. It introduces to the English student a whole class of diseases which have up to the present been most scantily, if at all, treated in our text-books. The labours of Charcot, Duchenne, and many others, have opened up quite a new field of study in this department, and we are glad to find that Dr. Bristowe has bestowed especial care on this portion of his work. We have already mentioned the exhaustive anatomical *résumé* which opens the section, including as it does the full description of the cerebral convolutions, a knowledge of which is so essential now that the doctrine of cerebral localisation is daily receiving fresh confirmation. It is not easy to particularise any portions, but we may instance as among the best the description of the various forms of aphasia, and the sections on disseminated sclerosis and tabes dorsalis. Nor must we omit a word of praise for the descriptions of chorea and of hysteria. Lastly, the value of the section on local paralysis is enhanced by the description of paralysis of the oculo-motor nerves, and the terse but sufficient explanations of the varieties of diplopia.

Our readers will see that this work is, as we stated above, a real gain to medical literature. Thoroughly scientific in tone, singularly exhaustive of a wide subject, and written in a style remarkably free from dogmatism, it bids fair to take a high place among text-books of medicine for many years to come.

The Influence of Climate in the Prevention and Treatment of Pulmonary Consumption. Lettsomian Lectures for 1876. By CHARLES THEODORE WILLIAMS, M.D., M.A. Oxon., F.R.C.P., &c. London: Smith, Elder, and Co. 1877.

THESE lectures form a valuable contribution to what may be called the climatic treatment of disease, and the statistics with which they are illustrated have been compiled in a painstaking manner. We can commend to the notice of our readers the observations on English health-resorts, because they exhibit definite and sanitary conclusions. The particulars recorded as to European and other places popular on the score of climatic excellences are fragmentary, and so far unsatisfactory in that they indicate no practical knowledge of the places dealt with. The same remarks apply to the chapter on sea voyages. Indeed, according to our own knowledge, the design of such a book as that now before us cannot be successfully compassed, unless the author not only gives the results of his own labours and inquiries, but adds to these the experiences of men whose records are practical if not specially scientific. The book that we wish to indicate must of necessity be in some sort a compilation. This is inevitable, for life is short, and the man does not exist who is cosmopolitan enough to compass half the health-resorts mentioned in this book, and afterwards to give scientifically useful particulars about them. But it is quite within the scope of Dr. Williams' work to enlist all kinds of aid from every quarter of the globe, and so to add greatly to the value of a work that is meant to aid "pulmonary cripples" in the search after health.

OUR LIBRARY TABLE.

Torquay, Past and Present. By SPENCER THOMPSON, M.D. London: J. & A. Churchill. 1877. — This little work has been written to give freshly arrived visitors or strangers at a distance an idea of Torquay — "its topographical and hygienic characteristics." Dr. Thompson is an excellent and pleasant cicerone, and renders clear the somewhat intricate topography of the place. We agree with much that he states in reference to the climatic and hygienic characteristics of Torquay, the many and varied advantages of which he lays before the reader with a degree of moderation and fairness generally unknown in such compositions. Nor does he seek to extol Torquay at the expense of other health resorts, but fairly admits that these may have "advantages suited to varied cases and constitutions." But the peculiarly mild and equable air of Torquay is beneficial in a large range of cases, more particularly to lung affections of a chronic nature, and, in our own experience, to invalids suffering from the sequelæ of tropical disease. To these Torquay is indeed an earthly paradise, and in the pleasant villas that stud its "Tors" many a stricken life has regained a measure of strength, usefulness, and happiness. Contrary to the generally received opinion, Torquay is a pleasant and even cool place of residence in summer; this is owing to its varied elevation, abundant foliage, and exposure to the sea-breezes. Dr. Thompson speaks of the general drainage as excellent, and to this we readily assent; but the position of the outfall as it at present stands is a serious nuisance, and most injuriously affects the interests of the town as a health resort, many visitors having the impression that the smell arising from this sewer at low water is due to defective drainage of the town itself, which is not the case, though complaints of local defects in house drainage are not infrequent. When the new outlet at Hope's Nose is effected, few towns will have a more perfect or complete system of sewerage, while the local defects of house drainage ought to be minimised by the constant vigilance of the sanitary authority.

Familiar Colloquies of Erasmus. Translated by NATHAN BAILEY. London: Hamilton, Adams, and Co. 1877.—The colloquies of Erasmus in the original have hitherto furnished students with excellent examples of colloquial Latin; the present translation, however, will give to readers who are not familiar with that language an insight into much that is interesting regarding the manners, customs, and opinions of the fifteenth and sixteenth centuries. As many of the follies, vices, and superstitions of that period still exist and flourish, a perusal of the cutting satires of Erasmus will not be without profit. Spiritualists should read "the Apparition," and learn how spirits of the fifteenth century managed their epistolary correspondence. Those who rave against the extension of the Contagious Diseases Acts should read "the Unequal Marriage," and reflect. Fashionable ladies will profit by a perusal of the "Lying-in Woman"; whilst in "the Seraphic Funeral" ridicule is heaped on the pomps and expenses of

the funerals of those days, expenses encouraged by the rapacity of a mendicant clergy. Indeed, no one can rise from a perusal of these colloquies without feeling that the weapons against folly and fanaticism have been whetted for present use by the keen wit of Erasmus.

The Lunacy Acts, &c. With an Introductory Commentary, Notes to the Statutes, including references to decided cases, and a copious Index. By DANBY P. FRY, Esq., of Lincoln's Inn, Barrister-at-Law. Second Edition. London: Knight and Co.; and W. Maxwell and Son. 1877.—The second edition of this valuable work appears opportunely. It is ably edited, conveniently arranged, and will be an indispensable volume on the bookshelves of practitioners in lunacy, while exceedingly useful to medical men generally.

White's Grammar School Text-books. Ciceronis Cato Major de Senectute. Ciceronis Lælius de Amicitiâ. London: Longmans.—These excellent little school books form part of a series of the most popular Greek and Latin text-books, by a learned and eminent teacher, who, from long experience, knows exactly the sort of aid that should be given to a young learner. The Vocabulary which is appended to each volume is ample, without containing anything that is not absolutely required to assist in the comprehension of the text.

My Lady-help, and what she taught me. By Mrs. WARREN. London: Houlston and Sons.—The servant difficulty is the burden of this little book, and, we are inclined to think, is made to appear rather greater than it really is. Whether the remedy here advocated, supposing it to be available on a large scale, would meet the case so completely as the author suggests, is perhaps open to question. Still there is a great amount of useful information in the book, and heads of households who have experienced the difficulty referred to would do well to consult its pages.

The Classified Directory to the Metropolitan Charities for 1877 (Second Annual Edition). London: Longmans.—The title of this volume is sufficient to indicate its nature and value. It gives information of upwards of one thousand charitable institutions; the religious, medical, educational, reformatory, preventive, relief, and other charities being arranged together under their respective headings.

THE ARCTIC EXPEDITION REPORTS.

IN continuation of the extracts from these Reports, published last week, we now summarise the journals of the other medical officers of the expedition. The value of the Reports from which these extracts are taken is impaired by the absence of certain Nosological Returns referred to. So, Staff-Surgeon Belgrave Ninnis, of H.M.S. *Discovery*, reports to the Medical Director-General that such and such returns (which do not appear) are forwarded, and continues with a meteorological sketch of events, the statistical results of which were as follows:—

1875.

	External Air.			Between Decks.			Thickness of Ice.
	Max.	Min.	Mean.	Max.	Min.	Mean.	
September . . .	+43°	+ 2°	+18·7°	+66°	+40°	+58°	On 30th, 10·5 inches.
October	+21·5	−39	− 9·05	+65	+33·5	+52	„ 31st, 16·6 „
November . . .	+18·9	−46	−17·75	+69	+43	+60	„ 30th, 20·6 „
December . . .	+26	−54	−24·5	+69	+43	+58	„ 31st, 24·7 „

1876.

	External Air.			Between Decks.			Thickness of Ice.
	Max.	Min.	Mean.	Max.	Min.	Mean.	
January. . . .	−13°	−63°	−40·6°	+69·5°	+41°	+60°	On 31st, 28·75 inches.
February . . .	+ 2	−58	−35·2	+[illegible]5	+41	+58	„ 29th, 31 „
March	− 8	−70·75	−37·5	+63	+42	+56	„ 31st, 36·5 „
April	+15	−42		+59	+26	+48	„ 30th, 39·25 „
May	+33·6	−20·5		+57	+34	+49	„ 31st, 38 „
June	+41	+16·5		+66	+41	+56	
July	+46·3	+29·6		+66	+47	+58	
August	+51	+19		+69	+49	+61	

After remarking that a large supply of musk-ox beef was obtained and utilised, the report says:—

"I regret that we were unable to carry out any of the suggestions contained in the letters of Dr. Carpenter and Dr. Parkes, and forwarded by you to Dr. Colan, Fleet-Surgeon H.M.S. *Alert*, on the 27th of May, 1875; but Dr. Colan, considering that any attempt to carry out the suggestions therein contained would be prejudicial to the health of the men experimented on, did not think it necessary to forward your letter and its enclosures to me. I was consequently unaware (until May, 1876) of the existence of the suggestions in question."

What these suggestions were does not appear. Sixteen cases of scurvy occurred under Dr. Ninnis, who attributes "our comparative freedom from this scourge" to the circumstance that musk-ox beef and other game were more plentifully supplied to his crew than to that of the *Alert*. After detailing the work of his junior colleague, the writer thus proceeds:—

"My views relative to this outbreak will be found in my journal; in the meantime, I consider the hopeless and monotonous nature of the work, its exceeding severity (far more so than that experienced in any other expedition), and the total absence of game during the sledging, sufficient under existing circumstances to account for it. The only fresh vegetables procurable were sorrel (*Oxyria reniformis*) and mustard-and-cress. Of the former a fair supply could be gathered at our winter quarters after the snow had cleared away. In February I sowed some mustard-and-cress, but having to be kept between decks in the dark, it was not fit for use until May, when I obtained about seven rations. As soon as the sun gave forth light and heat, I enclosed a space of ground on shore, 16 by 3 (feet), and glazed it with spare glass supplied for the engine-room. Seed was sown on the 29th of May, and the first crop gathered on the 21st of June; from this date until the 14th of August I was enabled to supply, not only the sick every day, but the whole crew on eleven occasions. Had we remained I have no doubt I could have kept up the supply until late in October, affording me at the same time healthful amuse-

ment in the open air. I likewise succeeded in growing peas and wheat, and celery seed sprouted, but we left before it had time to come to maturity. I consider that materials for erecting frames similar to cucumber-frames would be very useful if supplied to a similar expedition. I likewise consider that medicines should be, as far as possible, in the form of capsules for convenience of carriage, and not necessitating bottles, thereby reducing the weight to be carried on a sledge. The medicine-box and appliances designed by me for the use of the *Discovery* sledge parties weighed a little over 6 lb."

Dr. Edward L. Moss, who, as will be remembered, was Dr. Colan's junior on the *Alert*, accompanied the northern travelling parties as medical officer, and also, as Sir George Nares properly puts it, "handsomely volunteered" to take executive command of one of the sledges, under the orders of Commander (now Captain) Markham. The party started on April 3rd. "During the night almost every crew had men suffering from muscular cramp in the legs, thighs, and abdomen. We nearly all had more or less of it, but it usually went off when we got warm in our bags. I subsequently found that the more obstinate cases were always relieved and often cured by a little opium (i.e., half of a six centigramme square of gelatinised opium, equal to ·4 grain)." Two days after "Elias Hill suffered from eructations and pains about the liver and spleen. The pains were lower than those caused by the drag-belt in men unused to it." The next day another man "was no better, though he made no special complaint. He had been for some time in but feeble health, and now his despondency, feebleness, and fetid breath indicated some scorbutic taint, which I thought had possibly originated in the whaling service." And so on. On the eighth day of the sledge expedition the following entry occurs:—

"Before commencing our ninth march, it was arranged that H.M. Sledges *Bulldog* and *Alexandra* would assist the northern party till lunch time, and then start on our return journey to the ship. I therefore went through the men, saw the feet that had been frostbitten, &c., and found nothing to discourage advance in any of the men of the extended parties. Good and Wood were apparently well, and all were eager to proceed."

This excursion came to a close on April 14th—i.e., lasted eleven days. Dr. Moss then, nine days after, started with the *Bulldog* sledge, equipped for ten days, and travelling as much as possible by night. No antiscorbutics were carried. The equipment was as follows:—

"The weight of the loaded sledge was 1448 lb., or 207 lb. each for seven man. This total was made up of Lieutenant Aldrich's depôt, weighing 261¼ lb.; Lieutenant Giffard's, 435½ lb.; provisions for ten days, 210 lb. The pemmican was reduced to ½-lb. allowance, as less than that quantity had been eaten during the former trip, and the provisions left at Depôt Point were available if necessary. The bacon was increased from 4 to 6 oz. The advance of the season and the adoption of night travelling enabled me to dispense with several items, and reduce the constant sledge weights to 441 lb. 10 oz. An extra coverlet was omitted, and waterproof was substituted for the heavier canvas floor-cloth. The store-bag was reduced from 10 to 6 lb., and the medical stores to 12 oz. The latter reduction was effected by omitting the tourniquet, truss, and patent splint, because efficient and sometimes preferable substitutes could be constructed from materials on the sledge when the officer in charge is a surgeon. Medicines requiring bottles were discarded in favour of their dry equivalents. The fragile glass, often heavier than the drug it held, and subject to frozen cork or stopper, was thus disposed of, and a bulky box became unnecessary. Some gelatinised medicines which Professor Nordenskiöld had given me—specimens of those he had chosen for his own expedition—had already been found very useful. I took opium, morphia, and quinine in this form. Lead acetate, crystals, and gelatinised Calabar bean for snow blindness, some purgative pills and chalk powders, and a little benzoated lard, completed the list of medicines. The remaining stores were two flannel and three linen bandages, carbolised tow, cotton wadding, a sponge, and a catheter, together with a small pocket-case, holding, besides the above medicines, a scalpel, forceps and scissors, and a little hempen ligature thread. No change was made in the recognised clothing, except that several of the men took flannel as well as blanket feet wrappers, and omitted the spare jersey or drawers from their knapsacks. All carried their sealskin caps, but in calm weather wore in preference a light cap with peak and ear-flaps, made by themselves out of drill, flannel, and green baize."

This expedition lasted seven days, and at the end of the journal occurs the following very noteworthy postscript:—

"The tender and swollen ankles and legs mentioned in this journey were subsequently seen to be the joint effects of sledge travelling and scurvy, but were not at the time regarded as connected with that disease, because I had no personal experience of it, and the records of former expeditions detail such disorders independently of scurvy."

We give in detail the report on the miserable state of the Northern sledge party, when Dr. Moss, having gone to their relief, came up with them on the 9th of July.

"Rawlings, Simpson, Ferbrache, and Pearson staggered along in advance. Captain Markham, Radmore, Joliffe, Maskell, Harley, and Lawrence worked in the drag-belts, pulling Hawkins, Francombe, Shirley, and Pearce. Porter had died the day before. It was difficult to recognise any of the men, their faces were so swollen and peeled, and their voices so changed. They had just left their camp and commenced their journey. On examining into their medical condition I was satisfied that a continuance of the march would not endanger those on the sledges, and altogether, apart from the precarious condition of the floes at this late season, I did not think it necessary or advisable to stop all progress by camping till the arrival of the relief sledges. The detachment had obtained lime-juice at View Point depôt, and the stock we brought enabled all to go on double allowance, given to the worst cases in small quantities at suitable intervals. Egg-flip and port-wine were also freely given. When they camped I visited each tent, and a more thorough examination was made than was possible while the men were on the sledges. The following is a summary of their medical state, divested of technicalities. Except Captain Markham, Radmore, and Joliffe, all had swollen legs, hard to the touch, and often very tender. Where the red as well as the watery parts of the blood had escaped from the vessels, red and purple patches, like recent bruises, mottled the skin of the swollen parts, or showed in minute specks at the bases of hairs. Swollen muscles in the calf and ham kept their knees bent and stiff. One had a discoloured arm. None had strictly healthy gums, but in four only were they really bad. In these, dark purple swollen masses projected round the loose teeth, and the mouth ran with fetid saliva and blood. All but Pearce had fair appetites, and would be able to digest fresh food if we had it for them. Three hares had been obtained with great difficulty and deposited in the depôt for them. They had been eaten in two meals, and greatly relished. No diarrhœa followed; the opposite condition was more common. One man had dropsy of the testicle, which had been much worse a few days before. The foregoing symptoms, however, were not such as directly endanger life. The condition of lungs, heart, and brain required more attention. Every one had short breath on exertion, but especially Hawkins, Ferbrache, Simpson, and Pearson. The first two had dropsy of the chest, but not to such an extent as to prevent them lying down. In both cases the skin over the ribs of the affected side was puffy. Their respirations, when at rest, varied between 30 and 40 a minute. This state of lungs was accompanied by an irregular feeble pulse of 108 to 120 a minute. The slightest exertion produced prolonged difficulty of breathing and faintness. Instructions were given that the least movement was not to be attempted without help, and their comrades, though ill themselves, were as attentive, and much more solicitous, than well-trained nurses."

The treatment included the use of blistering fluid on the chest and abdomen, but was otherwise conventional, being, of course, almost entirely dietetic.

The journal of Dr. R. W. Coppinger, junior surgeon in

the *Discovery*, gives detailed particulars of an excursion in which he was in command of the sledge *Stephenson*. During this command (the particulars of which are very interesting) nothing special of a sanitary aspect occurred. When Lieutenant Fulford's party was rejoined, the following entry occurs:—

"Noticing before we started on this last expedition that Frank Chatel, captain of the forecastle, exhibited symptoms of a scorbutic taint, I recommended Lieutenant Fulford to take with him for the journey a supply of strong lime-juice and molasses. In addition to this remedy we availed ourselves of a supply of seal meat with which the Esquimaux Hans provided us, so that the seaman above mentioned was maintained in a fair state of health throughout the journey. On arriving at Thank God Harbour on the 7th June, we found Lieutenant Rawson encamped there with three men and the dead body of James Hand, A.B., who had died of scurvy on the 3rd inst. This party had been detached from the North Greenland division on the 10th May to convey to a place of safety the deceased, who at that date manifested signs of scurvy. Of Lieutenant Rawson's three men, two were suffering from scurvy—viz., George Bryant, captain of the maintop, and Michael Regan, A.B.; the former bedridden and in a most critical condition, the latter crippled in the legs, but otherwise not seriously affected. On inspecting the dead body of James Hand I found all the usual superficial signs of advanced scurvy manifested to a marked degree. From this period my duties have been almost entirely of a professional nature. Within ten days of the time of our arrival at Thank God Harbour, Bryant's life was out of danger, thanks to the supply of lime-juice, and to the seal meat, which our indefatigable Esquimaux obtained for us, and Regan was rapidly progressing towards recovery."

Dr. Coppinger's next special duty was to start to the relief of Lieutenant Beaumont's party, with, as he records, Lieutenant Rawson.

"Hans, myself, and a team of eight dogs, carrying sixteen days' provisions, and a half-gallon can of strong lime-juice, with molasses to correspond. The above party started from Thank God Harbour on the 22nd June, and on the 25th instant, near the northern arm of Newman Bay, met with Lieutenant Beaumont. Our worst apprehensions were realised. His party were in great distress. Four of the men were bedridden and in a dangerous condition; two were crippled and only just able to walk; while Lieutenant Beaumont, himself also affected with scurvy, presented a worn and haggard appearance, but was still clear-headed and full of energy."

After detailing various expedients devised to procure seal-meat, an ambulance sledge was fitted out, and the report states: "The remainder of the party got in on the 1st July, and after a few days all began to make rapid strides towards recovery. For this we were mainly indebted to the supply of seal-meat, wild fowl, lime-juice, and sorrel, which was here available."

We need not here notice in detail the particulars of Dr. Coppinger's last trip, in which he suffered from a somewhat severe attack of snow blindness. His elaborate and very interesting report closes with an abstract of the condition of seven of Lieutenant Beaumont's party, all of whom, when reached, were suffering more or less from scurvy.

We have endeavoured, in this week's article and in that of the 7th instant, to reproduce, as far as possible, the salient sanitary points of these journals, and refer our readers to our leading columns for remarks thereon.

DR. FRANKLAND reports that the water furnished last month by all the metropolitan companies drawing their supplies from the Thames and Lea was polluted with organic matter. The Southwark and Vauxhall Company delivered water which was slightly turbid, and contained moving organisms and coloured fibres. All the other companies supplied efficiently filtered water.

HYGIENE AT ST. MARY'S HOSPITAL.

No. II.

NOT the least valuable part of Professor De Chaumont's report is the information which it gives us concerning Tobin's tubes.

The hospital has been very plentifully supplied with ventilating-tubes, each of which has a diameter of seven inches. Sheringham valves have also been introduced near the ceiling. Thus, of the wards examined—"Victoria" has sixteen beds, twelve windows, eleven tubes, and five valves; "Cambridge" has twelve beds, and eight tubes, besides windows, and a Galton's ventilator; "Manvers" has fourteen beds, twelve windows, twelve tubes, and five valves; "Thistlethwayte" has eighteen beds, twelve windows, nine tubes, and five valves; the Male Accident Ward has eighteen beds, eight windows, fourteen tubes (six near the centre), and six valves; "Forester's" has twelve beds, six windows, ten tubes, four valves, and door to garden.

On the night of the 16th of August, the windows and valve-ventilators in all the wards were purposely closed, and reliance was placed solely upon the tube-ventilators. The ward which was subjected to the most severe test in this respect was "Victoria," which, at the time of the experiment, had been closed, with the exception of the tubes, for five hours. Its temperature was 78°, being nearly ten degrees above the outer air; humidity 59; carbonic acid (mean of 4) 1·309 per 1000; respiratory impurity ·365. From this it was calculated that only 695 cubic feet of air were supplied, and utilised per head per hour, and that the air was changed only at the rate of eight times in the twenty-four hours. Notwithstanding this, the air did not feel distinctly close. Of the eleven tubes, seven showed an *incoming*, and four an *outgoing* current; and it was calculated that the aggregate ingress was at the rate of 33,650 cubic feet per hour, and the egress 18,560. The balance between the ingress and egress escaped probably by the chimneys. This amount of air gave 2103 cubic feet per head per hour, or three times and a half that calculated from the carbonic acid. It was therefore evident, either that the air was badly distributed—a large part of it going to the upper part of the room, or to the fire—or that the current was not regular; both these causes were probably at work.

In Cambridge ward the result was very good. The ward had been closed for three-quarters of an hour, and it was found that the temperature was 75·9°; humidity 64; respiratory impurity 128; air, calculated per head, 4700 cubic feet; change of air at the rate of fifty times in the twenty-four hours. "Six of the ventilating tubes gave an in-coming current of 19,830 feet, and two an out-going current of 3550 feet. This gives per head only 1803 against 4700 calculated. Probably a good deal of air came in through Galton's ventilator, which was left open.

"Manvers" had been closed for an hour; it was a little close and felt hot. Temperature 73°; humidity 70; respiratory impurity ·259; air per head (calculated) 2320; change of air 23. Six tubes gave an in-coming current of 30,420, and six an out-going of 30,920, giving about 2200 feet per head, very near the calculated amount. We may, therefore, assume that the air was well distributed.

"Thistlethwayte" had been closed for half an hour. Ward felt hot and rather close. Temperature 72°; humidity 79; respiratory impurity 282; air per head (calculated) 2120; rate of change 22. Of the tubes five gave an in-coming current of 35,720, and three an out-going current of 14,700, giving per head 2100. Thus the measured and calculated amounts of air were identical, and the air admitted was, though insufficient, well distributed.

The Accident Ward demands a more detailed notice. It is a square ward, fifty-two feet wide, and forms a passage

to "Forester's," the ward beyond. The passage-way through the centre is marked off by a light iron railing, against which are six beds, and close to the head of each bed is a Tobin's tube. On the 16th there were sixteen beds occupied, and a large fire and six gas-jets (lowered) burning. It was very hot, but not close; temperature 78°; humidity 67. Different observations were made in different parts of the ward as to the carbonic acid, and with the following instructive results:—

	Respiratory impurity.	Air supplied.	Change in 24 hours.
Window-side, N.W. (leeward)	·202	2360	29½
Centre, N.W. (leeward)	·845	720	7
Window-side, S.E. (windward)	·205	2370	22½
Centre, S.E. (windward)	·277	2160	21
Mean, window-side of ward	·233	2580	25½
„ centre of ward	·509	1060	10
„ windward half of ward	·372	2210	21½
„ leeward half of ward	·526	1145	11
„ whole ward	·398	1515	15

Of the tubes, four on the north side showed an incoming current, and the six in the centre the same, the ten giving collectively 18,360 cubic feet. The four tubes on the south side gave an out-going current of 3310. The in-coming current averaged 1148 feet per head.

In Forester's Ward the temperature was 77°; humidity 67; respiratory impurity 688; air per head 905 cubic feet, and the rate of change ten times in the twenty-four hours. All the tubes gave an in-coming current of 12,950, averaging 1080 feet per head, which is slightly more than the tabulated amount—905 feet.

Speaking of the results obtained from the examination of Tobin's tubes on the night of the 16th, Dr. De Chaumont says:—"In 'Cambridge' the results were good; in 'Thistlethwayte' and 'Manvers' fair; in 'Accident' poor; in 'Forester's' and in 'Victoria' very bad.....It is plain therefore that, in hot weather at least, it is not possible to depend on them alone in the number supplied. Perhaps if a larger number were introduced the results would be better, but there would be some difficulty, practically, in dealing with the beams, &c., of the floors. It is claimed for these tubes that they supply a steady inflowing current as required, without necessity for special outlets, except the ordinary chimneys. The examination by means of the anemometer (Casella's small air-meter) showed that the current was by no means constant, and that it was clearly as often out-going as in-coming. It is clear that the chimneys alone are insufficient as outlets."

With regard to the action of Tobin's tubes, however, it needs to be pointed out that the results obtained on the 16th, when they alone were depended upon, are but very little inferior to those obtained on the following night (17th), "with everything open as on the first night." Thus, if we take as a criterion of the efficiency of ventilation the rate of air-change in the various wards, we find it to have been on the 16th, in Victoria 8, Cambridge 50, Manvers 23, Thistlethwayte 22, Accident 15, and Forester's 10, giving an average of 14½ for all the wards. On the 17th the result was—Victoria 23, Cambridge 17, Manvers 23, Thistlethwayte 25, Accident 10, Forester's 9½, and the average for all the wards 17. Thus the ventilation in the Accident, Forester's, and Cambridge was better on the 16th than on the 17th. In Manvers it was equal on both nights; in Thistlethwayte slightly worse; and in Victoria much worse. But it is hardly fair to compare the Victoria results, in which the trial was unintentionally most severe on the 16th. Omitting Victoria from our consideration, the results on the 16th, as compared with the 17th, are good. The *actual* results on both these nights were indeed singularly bad, but the cause of this was probably due to some atmospheric condition, as the direction of the wind and the humidity of the external air, which was 8 per cent. greater on the 17th than on the 16th, and 11 per cent. more on the 16th than on the 15th.

The bad results obtained on each night in the Accident and Forester's wards are to be taken as evidence of the difficulty of ventilating square wards, and, if the square wards are compared with the long wards (taking the rate of air-change as our criterion, and omitting Victoria from consideration), the result is most instructive. Thus in the Accident and Forester's wards the rate of change (taking the mean of three nights), was only 11½, while in the long wards it amounted to 34, or nearly three times as much.

Both reports are accompanied by excellent drawings of the microscopic objects found in the air-washings and the dust of the wards. To say that hay from horse-dung, epithelium from skin and mouth, and pus-cells were found, will be enough to show how carefully all accumulations of dust ought to be provided against in hospitals. The greatest curiosity discovered in the dust was a good specimen of the itch insect, Sarcoptes scabiei; and, unless our readers should conclude that this perhaps was an unlucky accident, we may state that this is the second occasion on which the sarcoptes has been detected in dust. When one considers the incalculable chances against finding such a creature, the fact is certainly remarkable. We presume, too, that it will be conceded as of secondary importance whether or not this parasite had been spontaneously generated in the dust, or had been hatched beneath the epidermis of a patient.

The report concludes with a few recommendations for the future, among which the following seem important:—"The ventilators ought to be most carefully and continually inspected, to see that they are not blocked up. I found in one a bundle of newspapers and an old flannel jacket, which had been thrust in, and the top-grating put on again, so that nothing would have been suspected had the absence of current not excited suspicion. No discretion as to closing a ventilator ought to be left to either sister or patient. It seems undesirable to have fires burning in the wards during hot summer nights. A single Bunsen burner would keep a sufficient quantity of water hot for all purposes; whilst the practice of drying things before the fire cannot be too strongly reprehended. I think there is good cause for remonstrance against the continued existence of the great dustyard near the canal basin. Such an accumulation in the neighbourhood of institutions is at all times objectionable, and particularly in proximity to a hospital. There seems good reason to believe that it is the cause of the unpleasant smell perceived in Thistlethwayte ward, which is more particularly exposed to its influence."

THE SMALL-POX EPIDEMIC.

THE Registrar-General's Weekly Return for the first seven days of April reported 85 fatal cases of small-pox in the twenty large English towns, against 87 and 93 in the two preceding weeks; of these, 78 occurred in London and 7 in Liverpool, whereas not one was registered in any of the eighteen other towns. Last week was the first since November, 1875, in which no death from small-pox was registered in Manchester and Salford. The weekly numbers in Liverpool have also recently shown a satisfactory decline.

The deaths from small-pox in London, which had been 76 and 86 in the two previous weeks, were 78 last week, of which 44 were recorded in the Metropolitan Asylum Hospitals, 6 in the Highgate Small-pox Hospital, and the remaining 28 in private dwellings. The proportion occurring in private houses showed a marked decline, probably due to the increased hospital accommodation which has recently become available. Excluding one case admitted from Harrow, and distributing the 49 other hospital cases, it is stated that 16 of the deceased small-pox patients had resided in Southwark, 6 in Pancras, 6 in Bow and Poplar, 5 in Islington, 4 in Bethnal-green, and 4 in St. George's, Hanover-square; in all, 11 belonged to the West, 17 to the North, 6 to the Central, 16 to the East, and 27 to the South groups of districts. The fatality of small-pox appears to have declined in North and East London, whereas it showed an increase both in the West and South districts. In the suburban districts of the outer ring 11 deaths were referred to small-pox, against 7 and 10 in the two preceding weeks; 6 occurred in West Ham and Stratford, 2 in Edmonton, and 1 each in Twickenham, Mortlake, and Bushey.

The Metropolitan Asylum District Hospitals contained 956 small-pox patients on 7th inst., including 35 convalescents at Limehouse, against 938 and 988 at the end of the two preceding weeks. The number of new cases admitted, which had been 228 during the last week of March, declined to 209 in the first week of April.

THE LANCET.

LONDON: SATURDAY, APRIL 14, 1877.

PUBLIC provision for the support of the aged and sick poor dates from the time of HENRY VIII. (1535.) In the reign of ELIZABETH (1601) overseers were appointed, and the burden of pauper maintenance duly adjusted on the back of the ratepayers. The load has grown heavier, and the spirit in which it is borne scarcely brighter though perhaps somewhat less impatient, as the years have rolled by. There is, however, one significant circumstance that suggests unsatisfactory reflections, and to which it may be not inappropriate to point attention at a moment when the boards of guardians, whose special duty it is to administer poor relief throughout the country are in process of reconstruction. Overseers of the poor have now practically nothing to do with the class they were originally appointed to protect, and the guardians entrusted with the care of the poor are preoccupied with the care of the pence. The system of Poor-law administration has, in fact, resolved itself into an organisation for the discharge of a disagreeable duty with the least possible demand upon the philanthropy of the ratepayers. "Guardians of the poor" is a misnomer; these officials should be styled "guardians of the pockets of the ratepayers."

Our immediate concern is, of course, with the interests of the sick poor, and it is especially grievous to notice that in the elections now in progress questions involving the nature and amount of the relief and comfort bestowed on the aged and infirm are thrust into ungracious prominence, too clearly showing how completely the duty of a guardian is misunderstood, both by candidates for the local dignity and those who look to the exercise of the parochial suffrage as a means of lightening the tax by enforcing economy. This is a very serious matter deserving the consideration of the public and the press. It is not necessary, and it would probably be inexpedient, to lavish even medical luxuries upon the indigent classes maintained by the poor-rates. Nevertheless it is "cheap" to cure the sick rapidly and completely, and to this end something like a liberal expenditure is the best policy, even from the parsimonious standpoint. We can assure the guardians of public money that they act unwisely and with unfairness to the multitude of needy taxpayers by stinting the means of cure. As men of business they may be reminded that the most effective appliances for the accomplishment of any necessary enterprise are, in nineteen out of twenty instances, the most thrifty. There is a special reason why this must be true of measures for the remedy of disabling disease and the restoration of the sick to the class of bread-winners. Not only is it more costly to support a patient during the enforced idleness of a lingering, because neglected, illness, but it is chiefly from the ranks of the half-cured the permanent sick-list is recruited. This is a consideration which has been unaccountably disregarded.

Too much engrossed with the evil of a burdensome poor-rate, guardians and electors have allowed their attention to be diverted from the business-like question how to reduce the outlay by lessening its cause. If we might be permitted to make a suggestion, it would be this: Separate the cost of pauperism due to sickness from that which is incurred for the maintenance of the able-bodied, the vicious, and the idle. If the statistical faculty so strongly and ably developed in connexion with the Poor-law administration should ever be turned to really useful account, it will take the form of an inquiry how much of the burden now imposed on ratepayers is directly or collaterally caused by sickness. When the main support of a family comes to be disabled, the weight falls upon the rates. It is not alone that the sick man or woman must be maintained; all who have hitherto relied on his industry will be thrown on the guardians for relief. In the face of this fact, it is folly to trifle with the source of the evil. The Poor-law system fails at this crucial point in the process of remedy, and the problem is never solved. Strangely enough, the State and the community decline even to recognise the root of the upas tree, while ever lamenting its growth and blighting influence. No provision is made for the prompt cure of disabling disease. The business of dealing with the plague is left to charity. Hospitals, neither subsidised by the State nor aided by the rates, are expected to bear the heat and burden of the day—to fight in the front rank of the battle with pauperising sickness; while workhouse infirmaries and the district medical service are employed to dole out half-measures to the casual sick and wounded, and the ever-increasing multitude of the permanently disabled. This is a wondrous anomaly; and if MACAULAY'S New Zealander, reclining on the ruins of London-bridge centuries hence, should moralise on the causes of our national extinction, he will probably ascribe the decline and fall of the empire to this prominently among the proofs of its political fatuity. A common-sense method of dealing with the difficulty before us would clearly make the care and cure of the sick poor an object of primary concern, even though no thought of kindliness inspired our policy, and compassion were rigorously excluded from the motives that controlled our conduct.

The able-bodied should be compelled to work. The days of whipping and the paternal discipline of the stocks are past, perhaps not to return; but the measures adopted for the relief of the crowd of parasites who can work, yet refuse labour, who wantonly prefer idleness to industry, may well be scant and rigorous. Meanwhile the sick, even from selfish motives, should be relieved fully and liberally; and the aged and infirm ought to be treated with that generosity which sympathy and benevolence must inspire. Paltry efforts to save a penny here and a penny there by crippling the efforts necessary to cure the curable, and to assuage the sorrows of infirmity incapable of permanent relief, are unworthy the sagacity of a wise people, and incompatible with the humane impulses of an enlightened race. It is not of the economy we complain, but of the senseless and short-sighted shape in which that principle too commonly expresses itself. Guardians do wisely to make thrift an object, and ratepayers are abundantly justified in requiring their representatives to keep a jealous and zealous watch over the expenditure of money wrung from needy contributors. The

course taken is, however, too often blind and unremunerative. Money is saved by refusing the means necessary to restore the sick pauper to health before he drifts into permanent disability, and when he has passed into a condition of decrepitude, his days are embittered by the parsimony of those who have neglected to cure and now evince but a grudging care of him. The method is defective and faulty throughout. It begins in misconception and ends in disappointment. A sound policy of thrift would take widely different counsel at the outset, and evince a kindlier and more creditable spirit at the close. Not a tithe of the misery would be entailed on the poor, and a reduced burden would remain to tax the strength and temper of the ratepayer, if the principle of Poor-law relief were more logical and businesslike. The stability of the British constitution as a whole is largely increased by the circumstance that it has been consolidated by slow growth and the trying but invigorating experiences of many changing and troublous vicissitudes; but this Poor-law system has gained little by the tinkering it has received. The otherwise generous people of England have never fully accepted the obligation to minister to the relief of their dependent classes. The spirit of philanthropy expresses itself in charity, and looks with coldness on the system of public succour for the distressed. The State and the commune alike steadfastly refuse to relieve when aid might rescue. Utter poverty is the sole claim to bounty. This principle underlies the system. The poor must needs be pauperised before they can be helped, and the paupers, by law created, are treated as parasites whom it is before all things expedient to terrify and resist. A helping hand would often save the struggling from sinking, but if that aid is given it must be by charity. Poor-law relief is withheld until the victim is immersed.

These considerations are not, we repeat, untimely at the moment when attention is engaged with the election of new boards of guardians, when candidates are expounding their views of administration, and ratepayers are striving to exact promises of economy. Let a passing thought at least be bestowed on the practical question, in what does real economy of relief consist. The same general principles which govern policy in matters of commerce apply here. Remove the causes of poverty, leave dependence without excuse, and you will gain two points in the enterprise of "putting down" pauperism, the remediable part of the evil will be brought under treatment, the sick relieved, the infirm humanely cared for and comforted; meanwhile the vicious and idle will be exposed, and in place of cruelty it will be an act of wisdom and kindness to mete out their deservings on the principle laid down by justice, "He who will not work shall not eat." There is no ground of sympathy or concern for the able-bodied drone who burdens the hive of industry, but for the sick, the stricken in mind, in body, and in years, humanity yearns with kindly solicitude, and to them a generous people will yield no grudging aid.

IT requires little experience to teach us that the majority of diseases which destroy life, and the treatment of which constitutes the major part of the duties of general practice, are of a more or less chronic nature. If we except the zymotic diseases, and the deaths in very cold and very hot weeks in winter and summer respectively, we shall find that we are occupied largely with slow processes of degeneration rather than of disease, extending over periods of months and even years. It is the glory of modern pathology to have thrown great light on such processes, both as regards their nature and their causation; and it ought to be the aim of practitioners to extract from the work of pathologists such lessons as will avail them in practice. To do English pathologists justice, they are amongst our best and most hopeful of physicians. They prefer clinical to post-mortem evidences of diseased states. In the recent discussion on the as yet somewhat transcendental subject of arterio-capillary fibrosis, this tendency was manifested; and it has been well illustrated in the careful way in which clinical and etiological observation has kept pace with pathological investigation during the last fifty years.

We propose to-day to direct attention to one of the many forms of chronic disease which has been elucidated within the last few years; partly because it has some association with subjects which have been discussed lately in the Pathological Society, partly because the elucidation of it is largely the work of English and Scotch pathologists—amongst the earliest of whom were GAIRDNER, HANDFIELD JONES, KIRK, SANDERS, &c.; partly because it has received but scant attention hitherto; but chiefly because of its great practical importance from a medical, and still more from a surgical, point of view. We refer to the subject of Lardaceous Disease, not as it affects one organ merely, but as it affects various parts of the system.

We may make this general remark—that the study of this subject affords another proof of the importance, in a medical respect, of the excretory glands of the body. Since the pregnant discoveries of BRIGHT it has been apparent to all thoughtful physicians that they must take into much consideration the condition of the great glandular organs of the body. Till his time, save attention to the coarser disorders of the liver, the great glandular system of the body was little regarded. Taking up HEBERDEN'S Commentaries, for example, and referring to the index, we find that the kidneys are not even mentioned. Now it is apparent that health and life depend very much on the condition of a man's glands, and that the difference, barring accidents and phthisis, between the life of one man and another, turns greatly on the state of the glandular system, and that this again depends largely upon the habits of the man.

The lardaceous disease is not confined to the glands. It does not indeed primarily affect the gland tissue perhaps. But practically we are interested in it as it comes to affect the liver, the spleen, and the kidneys, and we regard the way the subject has been elaborated as one of the most creditable and interesting bits of good work in recent medicine. We are not going to enter the lists of controversy, and decide—as between Dr. GRAINGER STEWART and Dr. DICKINSON, for example—whether it is due mainly to suppuration or to syphilis. Both these observers allow practically that it can be produced by either of these causes, and that it can be cured in certain cases by removing those causes. It is very interesting to note, in an incidental way, that in the recent discussion on visceral syphilis at the Pathological Society, Dr. GREENFIELD stated that lardaceous

disease of the viscera was totally absent in eighteen of the twenty-two cases of syphilitic disease from which his specimens of visceral disease were taken. This is a negative fact of great interest, and certainly tends to make us think more of the factor of suppuration in the production of this disease, which has been so admirably illustrated, clinically and pathologically, by Dr. W. HOWSHIP DICKINSON. It is difficult after the account which he gives, fortified by so large a number of cases, to resist the conclusion that the principal cause of lardaceous disease is prolonged and exhausting suppuration, especially in connexion with diseased bone, and that the principal way in which prolonged suppuration causes death is by producing such an altered condition of the blood as leads to the deposition in the liver, spleen, kidneys, and bowels—primarily in and about the arteries of those parts — of the lardaceous material, not amyloid in nature, but fibrinous, or at least nitrogenous. This being so, the cases of prolonged suppuration in the hands of the surgeon become more and more important in a medical respect. Surgery is often discredited by being dissociated from medicine. Sometimes the surgeon has fair cause of complaint against this medical colleague for not sufficiently insisting on the medical reasons for abstaining from operations which, from a merely surgical point of view, seem plausible enough. Henceforth at least surgeons cannot complain that pathology has not supplied them with good reasons for studying every device for the restriction of suppuration, for well considering the merit of alternative surgical procedures in the light of their different tendency to lengthen or to shorten the period of suppuration, and for getting the best medical opinion on the condition of the glandular system before undertaking grave surgical operations in cases characterised by prolonged and excessive discharge of pus. There are many indications that suppuration is a process that is coming more and more under the control of surgery as surgery is becoming more and more scientific in its methods. We venture to hope that with this increased command over suppuration there will come a greater control over those melancholy cases of lardaceous disease which we all meet with in practice, and which up to this time have proved so little creditable to either medicine or surgery. Conservative surgery is open to criticism on this point. Dr. MURCHISON has well said: "It may indeed be a question whether some of those operations which what is called conservative surgery has of late years substituted for amputation, from protracted suppuration, have not sacrificed the life of the patient to the endeavour to save his limb." Suppuration is an evil encountered by both the physician and the surgeon, but the peculiar form of it which leads to lardaceous disease is a matter of surgical oftener than of medical experience, and to surgeons we must mainly look for measures that shall control it.

SOME few days ago, the Journals and Proceedings of the Arctic Expedition 1875–6, under the command of Captain Sir GEORGE S. NARES, R.N., K.C.B., appeared in the form of a bulky Blue-book of 484 pages, profusely illustrated with maps and plans. It is, in fact, by far the most voluminous Parliamentary Paper presented this session. All the events of the voyage are categorically, if not minutely, recorded in official style, and the journal will be valuable to sailors, naturalists, astronomers, meteorologists, and in fact to all scientific men. We may return to it to cull various items of information from its pages, but it was manifestly our duty in the first place to see what was recorded by the medical officers of the expedition as to the health of the men under their charge, and hence we endeavoured to present last week an abstract of the Report of Deputy Inspector-General COLAN, and this week abstracts of the journals of Drs. NINNIS, MOSS, and COPPINGER. It is difficult to condense these journals successfully, because they occupy a great deal of space, and the sanitary, meteorological, geographical, and other scientific notes are commingled. The fact, too, that the Nosological Returns, as well as certain other statistics referred to, are not appended, increases the difficulty experienced in summarising these records. But those who choose to read our abstracts (or, better still, the Blue-book itself) will nevertheless find a picture of scurvy painted in simple and truthful colours that ought to impress the reader more than any clinical or other lecturer could possibly hope to do. The insidious approach of the disease, the fact that its existence was for some days entirely unsuspected, its sure and (under favouring circumstances) speedy advance, the miserable helplessness to which the subjects of the malady were eventually reduced, and their satisfactory recovery when proper remedies were found and used, are all set forth in these records with a graphic and forcible distinctness never surpassed by any author who has essayed to describe the disease. It is perfectly well known to our readers that the large majority of medical men have never seen a case of scurvy, and it appears that even Royal Navy medical officers chosen for Arctic service are no exception to the rule. Be this as it may, we opine that no surgeon on service afloat or ashore can, after reading these journals, fail to recognise, and that at a very early period, the premonitory symptoms of scurvy. And here we are compelled to express our surprise that (with the exception of the senior medical officer of the Expedition) the possibility of an outbreak of scurvy does not seem to have entered the minds of those in command of the sledges. Captain MARKHAM has been justly accredited with a very large amount of scientific and practical knowledge of Arctic work, and few men in it are so enthusiastic. But we find in his journal (p. 124 of the Proceedings) the following sentence: "We were for some considerable time totally unacquainted with the character of the malady with which our party were attacked, and we naturally concluded they were suffering only from swollen knees and ankles." The same journal seems, too, to indicate an unwillingness to give the disease a name. "Stiff knees," "swollen ankles," and so forth, are continually spoken of, dressings and rubbings with turpentine liniment being frequently used—a kind of treatment showing that for a long time the malady could not have been recognised by those engaged in the sledging expeditions. And a reference to the abstracts given in another column will show the fact pretty plainly.

The treatment of scurvy is more than a thrice-told tale, and need not be discussed. We shall once more refer to its prophylaxis when the First Lord of the Admiralty lays upon the table of the House of Commons the Report

of the Scurvy Committee; for it must be remembered that the journals from which we are quoting have no sort of connexion with the evidence adduced before Admiral Sir JAMES HOPE and his colleagues as to the proximate cause of this disastrous outbreak. All, of course, bear upon the same subject, but the journals before us simply record events, whereas the Arctic Committee have collected evidence, sifted and considered that evidence, and have recorded a verdict. It would appear that Mr. WARD HUNT objects to the production of the evidence and the verdict, for both have been in print and in the hands of the Admiralty for several weeks. There can be no excuse for any further delay in the production of these important documents, which will, as we believe, again bring to an anchorage beliefs upon a vital question of prophylactic medicine.

For some years past recourse has been had to the forceps as an aid to delivery in tedious labours much more frequently than in former times. This increase is mainly due to the employment of the instrument in those cases in which the "short forceps operation," as distinguished from the "long forceps operation," was performed, or as they are named now, the "low," as distinguished from the "high operation"—that is, in cases where the head is low down in the pelvis or on the perineum, and not at or above the brim. It is a question of great importance to obstetricians and their patients whether or no this increase in the employment of the forceps is conducive to good results. The change has arisen from a greater knowledge of the capabilities of the instrument, a more correct appreciation of its value, and of the advantages and dangers associated with its use. When "Meddlesome midwifery is bad" was the first maxim of practice impressed upon the young student of obstetrics, interference with the course of labour, except as a last resort, was disfavoured, and regarded as unjustifiable practice. Recent improvements, however, especially diagnosis by palpation and auscultation, version by the bipolar method, external manipulation, or combined external and internal manipulation, and the perfection of the forceps, have fortunately rendered the old maxim of less force. With the high operation great difficulties and dangers are doubtless associated; dangers arising from the condition calling for the employment of the forceps, difficulties inseparable from its application, and difficulties arising from want of means for estimating accurately the size of the pelvis and of the fœtal head. These are necessarily increased when the instrument is applied before the os uteri is well dilated, with a view to help or effect that dilatation.

It is probable that hydrostatic pressure, as by BARNES's bags, will prove, though it may be a slower, yet a safer means for effecting that object, for these will produce equable pressure on the cervix, while the pressure caused by the dragging of the head into the os by means of the forceps must necessarily be somewhat unequal, and consequently increase the risk of laceration of the lips of the uterus. When, however, labour has progressed until the head is low down in the pelvis, or on the perineum, the difficulties met with in the high operation no longer exist, and the dangers associated with the use of the instrument are greatly diminished. It used to be said that inflammation and sloughing of the genital canal, vesico-vaginal fistula, and ruptured perineum, were accidents resulting from the forceps operation; and doubtless this is possible, but it is highly probable that the evils, with the exception of the last, were results, not of the operation, though they followed it, but of prolonged waiting before the necessary help was rendered.

Ruptured perineum even—an accident which the forceps is frequently and rightly credited with—may in some cases, by timely and skilful use of the instrument, be prevented; for the uterine contractions at the end of a prolonged labour in some instances become incontrollable, and the head is thrust through the ostium vaginæ with such violence as to rend the recto-vaginal partition. On the other hand, the advantages of a timely recourse to instrumental aid are manifest, for by it infant life is saved, maternal suffering diminished, and recovery hastened. In the discussion on the paper read by Dr. EDIS before the Obstetrical Society on the 7th ult., a desire was expressed for an opinion from the Society on the frequency with which the forceps should be employed. To satisfy such a desire is at present not possible, and were it possible even to state in what proportion of cases throughout the United Kingdom recourse should be had to the instrument, it would still be of no value in individual practice, because the proportion of cases requiring its aid would vary, and vary greatly, in different localities, and it would be as unscientific as it would be wrong to have recourse to delivery by forceps once in a hundred cases in agricultural districts of the country for the reason that such was the proportion prevailing in the large maternities of London, Dublin, and Glasgow. How absurd it would be to apply the forceps in every hundredth case because an authoritative opinion had been given that it should be used in one per cent. of cases in England. The employment or non-employment of the forceps must be decided in each individual case after careful weighing of all the labour factors in that case; and as there are no means by which absolute measurements of these factors and their variations can be effected, it becomes necessary to fall back upon the only resource at our disposal, imperfect though it be—personal experience.

Annotations.

"Ne quid nimis."

SIR DOMINIC CORRIGAN AND THE AMENDMENT OF THE MEDICAL ACT.

SIR DOMINIC CORRIGAN has brought before the College of Physicians in Ireland the draft of a Bill for amending the Medical Act—or rather certain parts of it. The Bill provides that, after becoming law, no person shall be entitled to be registered who is not qualified both in medicine and surgery. But the more essential and important features in Sir Dominic's Bill is a proposal to establish a new examining board, to be passed by every person already licensed by the existing examining bodies before he shall be entitled "to hold any appointment as a physician, surgeon, or other medical officer, in charge of sick or wounded, either in military or naval service, or in emigrant or other vessels, or in any hospital, infirmary, dispensary, or lying-in hospital, not

supported wholly by voluntary subscriptions, or in any lunatic asylum, or poor-house, or parish union, or other society for affording mutual relief in sickness, infirmity, or old age, or as a medical officer of health." The Board is to be called the Civil Medical Board, and to be appointed by the General Medical Council. Dr. Haughton moved that the consideration of the Bill should be postponed until after the report of the committee to effect a joint examination between the College of Physicians and Surgeons. It may be noted as significant that in Ireland they have ceased to talk any longer of a Conjoint Scheme. It is this breakdown in Conjoint Scheme measures that justifies such proposals as Sir Dominic's. The objection to them is that they involve another Board. As we have already nineteen, it is scarcely worth while to create a twentieth that does not supersede the nineteen or any one of them.

CAPITAL PUNISHMENT.

THERE can be no question that the abolition of capital punishment would be the means of solving many of the points which prove a constantly recurring source of difficulty to those in whom is vested the administration of the criminal law. That it will be some day abolished there can be little doubt, but it does not seem quite clear whether or no that time has yet arrived. Has capital punishment any special deterring influence on intending murderers? Had it in days gone by any deterring influence on sheep-stealers and forgers? Since its abolition for the latter crimes have sheep-stealing and forgery become more common? and, were it abolished for murder, would men be less respectful than at present in the matter of human life? All of these questions, we take it, must be answered in the negative. Then why continue in a practice against which all men's minds revolt? It is argued by some that capital punishment is wrongly named; that it is not to be regarded as a punishment, but merely as an act of justice, and that he who intentionally deprives another of his life must consider his own confiscated. Even if we take this view of the matter, it is but too evident that unless, which is very unlikely, the two lives are of equal value to the commonwealth, justice is very inadequately satisfied. It has often happened that the murderer might rightly be considered as in every way a more highly developed and nobler being than the murdered, and only some unlucky accident has prevented his crime being reduced to manslaughter, or even to justifiable homicide. In the case of a life being confiscated to the State, it would be sounder policy for the State to *use* and not *destroy* the life thus confiscated.

Capital "punishment" differs from all other punishments in this—that all those who are in any way instrumental in inflicting it suffer very often only in a less degree than the offender. The judge as he passes sentence is often moved to tears, the counsel for the prosecution have a most unenviable task, the witnesses often require strong persuasion that in any case they will not be answerable for the effect of their evidence, and the jury strain every point, except in the most savage cases, to recommend the criminal to mercy. If these officials suffer mental anguish, what shall we say of the mental degradation of the hangman, who presumably suffers none? Is it fair to demand such a service of any fellow-creature, and is it right to ask any man to do that which no really right-minded man would willingly do? Education must ultimately deprive the State of this grim official.

In the meantime we have a right to demand that the extreme sentence of the law shall be carried out decently and without risk of any ghastly bungling. It is surely high time that some machinery more certain than that in vogue—such as would leave no room for the exercise of a hangman's caprice—was employed. The Spanish garotte, or the bowstring, would perhaps be preferable to the present method, provided a "gentleman" with sufficient *sangfroid* could be found to act as the deputy of Mr. Sheriff.

DEATH OF A SURGEON WHILE UNDER THE EFFECTS OF NITROUS OXIDE GAS.

WE are enabled to give our readers this week fuller details than appeared in our last issue respecting the untimely death of Mr. George Morley Harrison, a Manchester surgeon, while under the influence of the anæsthetic usually employed by dentists. The deceased gentleman, after completing his day's work, called upon his immediate neighbour, Mr. E. H. Williams, dentist, and complained that in consequence of an alveolar abscess proceeding from some carious stumps he was unable to obtain any rest at night. At his own request the gas was administered by Mr. Williams, assisted by his servant (?). Mr. Harrison did not readily fall under its influence, and when he became unconscious Mr. Williams removed two stumps, and then observed that his patient was unusually quiet. He immediately dashed cold water over his face, and had the windows and doors thrown open. As he did not appear to revive, he sent the servant for Dr. Noble, whose residence was near, with directions, if he should not be in, to go for Mr. Worsley, the nearest surgeon. When the latter gentleman arrived on the scene life was apparently extinct, the face and neck were livid, the eyes fixed and open and the pupils widely dilated, the hands cold and pale, but the feet and legs quite warm. The usual means of restoration were employed—viz., cold affusion, artificial respiration, friction, revulsives to the feet and legs, and the galvanic battery, but all proved unavailing. The post-mortem examination was made eighteen hours after death by Mr. Jones, pathologist to the Manchester Royal Infirmary, Dr. Noble and Mr. Worsley being present. The body was well nourished, the lividity of the face and neck being still apparent. On incising the scalp a quantity of dark fluid blood was found between it and the periosteum, while on removing the calvaria the dura mater was found very adherent, the membranes were distended with serous fluid, and the veins intensely congested. The ventricles were also filled with the same fluid; the brain substance itself was firm and healthy. On opening the chest (the cartilages of the ribs were completely ossified) there was found a large deposit of fat in the anterior mediastinum, and upon the pericardium; the lungs were very dark-coloured and intensely congested. The heart was slightly enlarged, soft, and friable; the left side quite empty, and the right full of dark fluid blood, while there was a considerable deposit of fat in the interventricular furrows. On section the aorta was found coated with atheromatous deposit, and the aortic and mitral valves were thickened. On section of the abdomen a very great amount of adipose tissue was observed, the omentum being also much thickened by fatty deposit. The stomach was greatly distended with gas, and contained a small quantity of party-digested food. The liver was much enlarged, and in a state of fatty degeneration; the spleen healthy, but gorged with dark blood. The kidneys were both healthy, but deeply congested. We will not stop now to discuss the question whether the unfortunate gentleman died of syncope or asphyxia. (The jury returned a verdict of "Death from syncope.") The main lesson the event teaches is, we think, that the administration of any anæsthetic by other than duly qualified medical men is unjustifiable, and should be prohibited, and the circumstances of the case enforce the arguments of those in the upper walk of the department of dental surgery who contend that the so-called "surgeon dentist" should

be made to possess a medical qualification. Excluding possible fatalities, there is little doubt that where the patient has a "flabby" heart the administration of nitrous oxide gas may cause irreparable damage by over-distension of the right side of the organ, as Drs. George Johnson, Burney Yeo, and Mr. Hamilton Cartwright attempted to prove some time back in our columns. Therefore, the patient's heart should always be examined before submitting him to the effects of an anæsthetic; and if the dentist is not medically qualified himself, he should summon a surgeon to his assistance.

IS PUERPERAL FEVER AN EPIDEMIC DISEASE?

DR. MATTHEWS DUNCAN has published in a separate form a paper "On the alleged occasional epidemic prevalence of Puerperal Fever," which he read last year before the Medico-Chirurgical Society of Edinburgh. The object of the paper is to adduce evidence in support of the views which Dr. Duncan has long been known to hold against the epidemic character of puerperal fever. Dr. Duncan maintains his views, and attacks those of his opponents with characteristic plainness of language and force of argument. He attempts to show that puerperal fever and erysipelas do not behave like diseases whose epidemic character is established; and, secondly, that they do behave like diseases which are recognised as having no epidemic character. He says that on the part of those writers who uphold the epidemic theory there is allegation, and nothing more. He bases his own view on the statistics of London, and he gives diagrams which show that while cholera, scarlatina, and small-pox do unmistakably prevail epidemically, the lines indicating the prevalence of puerperal fever, and even of erysipelas, have no such marked epidemic rises, even over a period of twenty-six years—viz., that from 1848 to 1874 inclusive. The diagrams certainly indicate also that in periods when scarlatina is epidemic there is no corresponding rise in the mortality from puerperal fever. They seem to justify Dr. Duncan's strong words in reference to the lines signifying death from scarlatina, and those signifying fatality from puerperal fever; "there is an utter absence of any relation" between scarlatina and puerperal fever. He considers that the diagrams show that in the great epidemic of scarlatina in 1869 and 1870 "all the combined accoucheurs of London did not increase the amount of puerperal fever among their patients by attending scarlatina and childbed cases simultaneously." He does not go the length of denying that harm may have been done in individual cases, but he thinks it must have been very rare. Another feature of interest in Dr. Duncan's paper is the season curve of scarlatina, of erysipelas, and of puerperal fever, respectively, taken from the paper of Buchan and Mitchell. These show that the season curve of scarlet fever is very different from that of puerperal fever, while those of puerperal fever and erysipelas nearly agree. This fact Dr. Duncan says possibly contributes to establish the probability of some alliance between puerperal fever and erysipelas—which the diagrams founded on the statistics of London for twenty-six years had not supported. This admission is important. The fact of a seasonal correspondence between erysipelas and puerperal fever is not a proof that one produces the other, but it is a presumption—and a presumption so strongly enforced by clinical facts that medical men should accept it as a practical proof, and act with corresponding care. Though we are very much inclined to agree with Dr. Duncan that the epidemic prevalence of puerperal fever has not yet been proved, and is not supported by the statistics he adduces, we should not overrate the value of rough statistical data. There are special reasons in this case for not trusting to them too much. If puerperal fever is not spread epidemically by great atmospheric influences, then the care of practitioners should be doubled to see that it has no local or personal origin. No mere negative indications of statistics can justify practitioners in neglecting minute care and trouble to make it impossible that they should be the medium of the transmission of disease.

SMALL-POX IN THE HOUSE OF CORRECTION, COLDBATH-FIELDS.

As many incorrect statements of the number of inmates of the House of Correction who have been attacked with small-pox have been published lately, we have thought it desirable to ascertain the precise amount of damage which has taken place in the establishment. The following is a summary of the cases in their order of occurrence:—The first case was that of a boy aged fourteen, on the 19th of December, who recovered; the second occurred on the 22nd of the same month in a man thirty years of age, who died of hæmorrhage from the lungs; the third on the 13th January, a black man twenty-five years of age; this was a severe confluent case, terminating fatally. (The last two cases showed no marks of vaccination; all the others had distinct marks.) The fourth case was that of a boy, and occurred on the 16th of January; the fifth case, on the 19th of January, a man aged thirty; the sixth case on the 4th of February, a boy aged sixteen; the seventh case, on the 7th of February, a man of twenty; the eighth case, on the 16th February, a man of thirty-one; the ninth case, on the 23rd February, a man of twenty; the tenth case, on the 10th March, a man of twenty-four. All these cases have recovered. The eleventh case occurred on the 18th March. This patient had abscess in the throat and bronchitis, and died. None of the patients had come into the prison recently, and none had been in contact with previous cases. In every instance the clothing and bedding were removed with the patient to the separate small-pox hospital, and the bed was afterwards thoroughly fumigated and cleansed. All the officers who had not had small-pox, or had not been successfully vaccinated within a recent period, were immediately revaccinated, and fortunately no one amongst the officers or nurses was attacked. The cases were treated in a detached building, quite away from the other prisoners, and the nurses were compelled to wash and change their clothes before going out of the prison. The patients are now all cured, and no case has occurred since the 18th March. Considering that the number of prisoners in the establishment has never been less than 1800 during the period when small-pox prevailed, we may well congratulate Dr. Smiles on his successful efforts to stamp out the disease.

HABITUAL DRUNKARDS.

DR. GAIRDNER, of Glasgow, writes:—"I have never doubted either the propriety or the expediency of restraining habitual drunkards, as well in the interests of society as in their own. But I have also a feeling that it will be difficult and possibly inexpedient to pass a measure founded on what may be called the dipsomaniac theory in its more thoroughgoing form—i.e., the theory that a man incurably addicted to drink is, *ipso facto*, a subject for medical care rather than police supervision. Such a theory, when applied to persons not demonstrably insane, must always be unacceptable to the great mass of liberty-loving persons in this country, and tends in its applications in detail to strain the medical prerogative in a degree most injurious to our legitimate professional influence. Dr. Bucknill's recent revolt against the whole of this kind of legislation is just an example of what will go on in many minds, even of intelligent medical men, if the dangerous privilege is conceded to them of pronouncing

upon the fitness of habitual drunkards to live at large. But what I should gladly see carried out is a measure making drunkenness, and *a fortiori* habitual drunkenness, an offence and a cumulative offence; so that a habitual drunkard of a certain degree of *habit and repute* should be judicially deprived of his liberty or otherwise prevented from getting access to his alcoholic temptation for a lengthened period. This, of course, would involve primarily the idea of punishment in various degrees as for a crime against society, but the question of insanity in particular cases or of diminished moral responsibility through weakness of mind, might be reserved as a genuine medical question, affecting the nature and amount of the penal consequences."

ON THE EXCISION OF THE EPIPHYSIAL CARTILAGES FOR THE REMEDY OF CERTAIN DEFORMITIES OF THE SKELETON.

OLLIER, of Lyons, has recently published[1] a very interesting clinical memoir, as a sort of addendum to his original paper which dealt with experiments on animals, with a view of applying the proceeding to the human subject. This paper contained a complete account of the pathological and physiological questions connected with it, and which we need not here recapitulate.[2] Since its publication M. Ollier has had several opportunities of putting his theories into practice. The particular deformities, to remedy which he has especially directed attention, are those affecting the parallelism of the bones of the forearm and leg, caused by fracture, separation of the diaphyses, and osteitis supervening during the period of growth of the skeleton.

He cites the following cases, which are given in all detail in the memoir referred to. The first consisted of an arrest of development of the tibia, consequent on a suppurating osteitis of the inferior juxta-epiphysiary region of the bone, with a continuation of the growth of the fibula and progressive incurvation of its diaphysis, resulting in dislocation of its two extremities, and followed by talipes equinovarus. The two epiphysial cartilages of the fibula were excised, and the result was an entire re-establishment of the relations of the inferior extremities of the tibia and fibula, and disappearance of the talipes.

The second case was one of suppurative osteitis of the diaphysis of the radius, extending to the inferior epiphysial cartilage, with an arrest of development of the bone, preventing its keeping pace with the increase in length of the ulna. This was associated with dislocation of the inferior extremity of the ulna downwards and backwards, the hand becoming more and more inclined towards the radial side. All apparatus used in this instance was unavailing, but after partial destruction of the inferior epiphysial cartilage of the ulna, there was progressive and spontaneous straightening of the hand.

M. Ollier arrives at the following conclusions:—1. The increase in the length of bones is arrested by excision of the epiphysial cartilages, an operation which affords the same results in man as in animals. 2. The excision of these cartilages affords a rational example in the case of unequal development of the parallel bones of the leg and arm. If one of the bones composing the segment of the member becomes arrested in its development, the other, continuing to increase according to the normal laws of its development, becomes relatively too long. Its form, conformation, and relation with neighbouring bones will be necessarily changed, and the result will be progressive deviations of the foot or hand. 3. By arresting the growth of the bone which, from its hyper-development, is too long for its fellow, this deviation is corrected, and the two bones progressively acquire their natural direction. 4. This operation, however, is not applicable to all epiphysial cartilages, owing to their relations to articular cavities. But in the leg and forearm—that is to say, those parts of the body to which excision of the cartilages is especially applicable, they may be attacked without danger, provided the surgeon interferes only with their superficial aspects, or at all events takes great care not to involve the deeper. After the operation the limb must be placed in a silica bandage. 5. It is more thoroughly effectual and more rational than the resection of a portion of the diaphysis, and the operation should be proposed whenever the deviation of the hand or foot resists the straightening attempts of instruments, and, moreover, when the deformity, progressive in its nature, will expose the patient to a still greater inconvenience.

[1] Revue Universelle de Méd. et de Chir., Nos. 2 et 3.
[2] Du moyens d'augmenter la longueur des os et d'arrêter leur accroissement. Comptes Rendus, 1873.

"GRINDING THE WIND."

A STRANGE lack of ingenuity is shown in the continued use—at least in some of Her Majesty's and county and borough gaols—of the treadmill, cranks, and pumps, as means of imposing hard labour upon prisoners. We bear in mind the special difficulty created by the need of resorting to employment which shall not compete with the industry of bread-winners. That is an obligation which no economist would disregard. We hold it to be a preliminary condition of success that this requirement should be rigorously fulfilled. The manufacture of mats, brushes, ropes, baskets, and, except under special circumstances, even making roads and erecting fortifications, are occupations in which prisoners should not be allowed to engage, for the obvious reason that the work they would perform must limit the opportunity of bread-winners who labour that they may live. Society owes it to its law-abiding members to see that honest industry is not rendered nugatory by the penalty imposed on offenders for their crimes. Nevertheless, it shows scant fertility of resource to inflict wholly abortive exercise in despair of finding a form of labour which shall not compete with trade. It has, indeed, been contended that the punishment acquires special force from the fact that the strength spent is fruitless. This is a sorry argument at the best. It would probably distress a prisoner quite as severely to know that he was working out a recompense to the State whose laws he has transgressed, or the individual whose interests his crime has assailed. In any case the sentimental side of the question need give public opinion little concern. There is, however, one aspect of the practice known as "grinding the wind" to which attention may be usefully directed. It has long been recognised as a social fact of some significance that the sort of idleness which springs from having nothing to do plays no inconsiderable part in the causation of crime. Ignorance of a manual trade is a fertile source of indolent habits, a dissolute career, the recourse to sinister modes of eking out a livelihood, vice in all its varieties, and law-breaking in its most debased and heinous forms. The criminal classes are largely recruited from the overcrowded ways of self-support, and habitual offenders commonly "live by their wits"—that is to say, they have no certain means of maintenance. Why not extend the custom of teaching each prisoner a trade to all offenders imprisoned for any term extending beyond seven days, and let the craft taught be a laborious form of industry other than that with which he professes to be acquainted? Many prisoners working out the penalty of a first offence might be enabled by this means to start afresh, without returning to their old haunts. For example, the bricklayer might be qualified to begin life with new opportunities as a carpenter, cutting himself adrift from associations which would again lead him to crime. The clerk,

who has been perhaps impelled to evil by straits and "temptations" in his old calling, would be able, if he pleased, to escape from the toils of fate, and ply an honest hand in some other line. Many crafts might be so far mastered in three or six months that a chance of obtaining employment would be opened up to the reforming offender. If trades were taught, no question would arise as to their exercise in prison; the produce of 'prentice hands being scarcely marketable. The treadmill is an instrument of torture exhausting to body and injurious to mind. We question whether it is a penalty Justice has a right to inflict. Wind-cranks and pumps are purposeless; shot, roller, and cart drills are senseless devices. We venture to urge reconsideration of the whole subject of prison labour from the standpoint of a reformatory policy, opening up some new mode of life to every prisoner. The principle already embodied in the discipline of criminals working out long sentences is applicable to the case of less grave offenders, who may possibly be more readily reclaimed.

LYMPHADENOMA.

AT the meeting of the Société de Chirurgie, on Feb. 21st, M. Trélat read a paper dealing with the surgical aspect of lymphadenoma, or, more properly speaking, of lympho-sarcoma. He stated that in 1872 he had under his care, at La Pitié Hospital, a man, thirty-six years of age, suffering from a tumour of slow growth on the right side of the neck, with enlargement of the neighbouring glands, and a small tumour in the thigh. The removal of the tumour in the neck was followed by recurrence, and the patient sank after the second operation, and there was found disseminated in the vertebræ, sternum, spleen, and liver, a large number of growths of lymphomatous nature. The lesson derived from this case by M. Trélat was to decline to operate in all cases of lymphadenoma in which any suspicion of visceral implication might be entertained. However, last year another patient came to him, apparently in robust health, aged fifty-five years of age, presenting a tumour of the left testicle. He stated that when twelve years old he received a blow on the scrotum, but thought nothing of it until he was declared unfit for military service on account of some malformation of the left testicle. He married, and became the father of fourteen children, and it was not until he was forty-eight years of age that he first noticed a slight swelling of the left testicle, a swelling which very slowly increased, so that he did not come to the hospital until seven years after. The tumour was smooth, firm, slightly painful, and compressed the testis and epididymis, and M. Trélat came to the conclusion that it was a sarcoma of slow growth. He accordingly performed castration; a small tumour upon one of the eyebrows being considered to be probably of lipomatous nature, and nothing to do with the testicular growth. However, the disease recurred in the genitals, the right testis became the seat of nodular and painful enlargement, and a fresh growth appeared on the eyebrow by the side of the former, and the patient somewhat rapidly emaciated and died. Tumours of lymphadenomatous type (similar to the primary growth in the left testis) were found in the right frontal region, sternum, and spine, and in the mesentery, liver, and spleen. M. Trélat asked whether it were possible to diagnose such cases, and gave it as his opinion that previous to resorting to ablation small portions of such growths should be excised for microscopical examination, and if they were of lymphomatous nature their ablation should not be attempted. It was pointed out in the discussion, however—and here we think most surgeons and pathologists will agree—that there are forms of lymphadenoma which are malignant, and others that are truly benign, but it was not said whether there were any definite histological criteria for discriminating between the two varieties. M. Trélat also added that the malignant forms were peculiar to adults, and that they did not always arise primarily in lymphatic glands.

IDIOTS, IMBECILES, AND HARMLESS LUNATICS.

WE have so strongly contended that idiots, imbeciles, and harmless lunatics should be treated or sheltered in establishments distinct from those occupied by the subjects of acute, or active though chronic, insanity, that it is with satisfaction we welcome the support of an influential committee appointed by the Charity Organisation Society, in enforcing this view. A report which has just been issued advocates the provision of special asylums. We only demur to the proposal that these should be placed under the jurisdiction of the Local Government Board. This department has already as much business on hand as it can well manage, and we do not think the manner in which the "workhouse asylums" at Leavesden and Caterham have been treated as lumber houses for troublesome old paupers, is so encouraging as to inspire confidence. Another fatal objection to the jurisdiction of the Local Government Board is the perversity with which it clings to the rule that all orders of intellect must be considered matured at the age of sixteen. Practically sixteen may be only equal to six years in the life of a healthy child, when it is an idiot to whom the rule is applied. Idiots, imbeciles, and harmless lunatics undoubtedly need special training, or care, in institutions adapted to their exclusive use, but they should be placed under the direct protection of the Commissioners in Lunacy, and the Local Government Board ought to have no power of intervention, except, perhaps, as regards the provision of requisite funds.

SAVAGE ASSAULTS.

IT is humiliating to notice the increasing number of assaults characterised by more than common brutality reported in the daily papers. An amazing amount of coarse animal ferocity would seem to prevail side by side with growing intelligence. It may be that we are too impatient of the fruits destined to spring from general enlightenment, but it is disappointing to find that not a few of the most atrocious crimes, which are making day and night hideous in the metropolis and some of the largest cities, have been committed by miscreants as well informed as the average member of a busy population can hope to be when education has achieved its greatest triumphs. Even thus early in the experiment of national improvement, we may conclude that mere secular instruction will not suffice to elevate the character or purify the heart. Man is an animal who perpetually exhibits the tendency to retrogression in the scale of his development. If not strengthened by training, in the individual as well as the race, that moral self-government and self-restraint which, being specially developed, places him far above the level of animals not endowed with so complex a brain as his, will fail to assert its supremacy, and mere brutish propensities must prevail. This is what happens in the case of men and women who, throwing the reins on the neck of their passions, riot in lawlessness and vice. It matters not whether the passion be one of appetite, lust, or revenge, when once the intelligent will is dethroned there is no limit to the demoralisation that may ensue. The remedy for this evil is undoubtedly the cultivation of the faculty of self-control. Principles are no good to a man who cannot conform his conduct to the dictates of his judgment, just as a knowledge of navigation and the sea-course is useless to a mariner who can neither handle a ship nor steer. The moral question is so plainly one of

psycho-physiological interest that we make no apology for pointing out to educationalists and moral teachers how, by ignoring the need of culture and development, they are neglecting opportunity and working amiss. No faculty of mind, and no function of body, can be strengthened except by use. Abstinence is not self-control, and the power of self-government cannot be trained except by exercise.

THE PROPAGATION OF TYPHOID BY MILK.

THE medical officer of health for St. Pancras, Dr. Stevenson, reports a circumscribed outbreak of typhoid fever in his district, which was determined by the distribution of the typhoid fever poison in a particular milk-supply. Forty-six cases of the disease occurred within a brief period, and of these cases forty-one consumed milk obtained from one and the same source. Of the five other cases, two were imported into the locality, two were developed under conditions ordinarily associated with typhoid fever, and of one no obvious cause could be ascertained. A detailed examination of the cases showed that the only link of connexion between the greater number, which seemed likely to be concerned in the production of typhoid, was the community of milk-supply. One case is instanced which seems to afford something like a direct confirmation of the theory of propagation of the disease by the milk. One of the patients was the sister of a boy in the employ of the milkman. This young woman had been confined to her room for several months with a bad leg, and must have contracted typhoid at home. Her brother was in the habit of bringing home some of the residue of the afternoon's milk, and this the woman drank. As she was located on the fourth floor, she was certainly not exposed to emanations of sewer gas. About four hundred families were supplied with milk in this particular milk-walk, and of these twenty-one, or 5½ per cent., were attacked with typhoid. Dr. Stevenson entertains no doubt that the poison of the disease was distributed in the milk, but at the time of the report from which the above facts are taken the mode in which the poison had gained access to the milk had not been ascertained.

THE SANITARY CONDITION OF ST. PETERSBURG.

A propos the vast collections of snow heaped up in the open spaces of St. Petersburg at the close of winter, several of the journals of that city have been making very stringent observations on its defective sanitary administration. The *Medical Gazette* describes the piles of snow referred to as containing also in large quantities the filthy detritus of the streets from which the snow has been gathered—a detritus which would appear to become peculiarly offensive with the incoming of the warmer weather of spring. Other journals treat this matter as but one of numerous indications of the want of proper sanitary administration of the capital. The *Gazette* states that very many of the new houses are built without any regard even to the elementary laws of salubrity; their courts, narrow and surrounded by buildings of great height, are deprived of light and ventilation, and the air within them is fouled by the latrines, which are of the most defective construction, and are never emptied except at the last extremity. No provision, moreover, is made for the ventilation of the staircases, and these are impregnated with unwholesome and infected effluvia. St. Petersburg does not possess any sanitary statistics, hence it is not practicable to show in figures the whole extent of the deadly influence of the present state of the city upon the inhabitants; but the serious and persistent prevalence of enteric fever is alone sufficient to prove how great is the urgency for some amelioration of its insanitary condition.

A COUNTY COURT ESTIMATE OF PROFESSIONAL SERVICES.

IN a recent case in the County Court, Saffron Walden, the plaintiff, Mr. J. C. C. Forsayeth, surgeon, of Clavering, claimed £6 11s. 6d., for attendance, medicine, &c., from the 2nd of June to 17th of August. This includes a period of sixty-six days, for which the sum charged was not at all unreasonable. But the complaint was a whitlow, and the judge and the counsel for the defendant kept the Court in laughter for a long time over the idea of such a sum being charged for a whitlow. It is pretty clear that they never had one themselves, or they would not have been so jocular. The length of the attendance and the number of visits were explained by the plaintiff, who said that the defendant kept sending urgent messages to him two or three times a day to visit him. The defendant maintained that some of these were friendly visits, in which the plaintiff smoked a pipe and had a glass of brandy-and-water. Though such comforts are better declined in patients' houses, it is shabby in a patient to turn his hospitality into an argument against paying for professional visits, which he demanded on threat of sending for another practitioner. A whitlow is often a most painful and troublesome thing, and not seldom involves the loss of a finger. For such a complaint in such a patient the charge does not seem to us excessive, and we consider the judge's remarks most unjustifiable. He allowed the plaintiff only £2 15s. 6d.!

DIETARY AND MORTALITY.

OUR attention has been called, *à propos* the remarks of THE LANCET Commission on the subject of dietary and mortality in the asylums for Middlesex and Surrey, to the report of a committee appointed to inquire into certain matters relating to the Broadmoor Criminal Lunatic Asylum. It seems that while the committee attributed a low death-rate to the good and plentiful supply of food provided at Broadmoor, Mr. Mitford and Dr. Mouat demurred to what they deemed the excessive cost, the last-mentioned authority going so far as to express an opinion that Broadmoor does not exist "to secure exceptional conditions of health and comfort to its inmates." We can understand how, "from the criminal aspect of the matter," which Dr. Mouat avowedly contemplates, the "comfort" of these insane prisoners may not be important, although the fact that they are *insane* might be held to bespeak some sympathy for their condition; but what can he mean by asserting that "conditions of health," whether "exceptional" or ordinary, are not of primary importance? It is abundantly evident that a full and good diet is essential to all classes of the insane, whatever their moral character may be, and we should be concerned to find that any *professional* opinion gave the impression of discrediting the success of medical treatment in prolonging human life.

THE ROYAL INFIRMARY FOR CHILDREN.

THIS old-established charity, which seems to have entered upon a new sphere of usefulness, has set an example which, we think, might very well be imitated by many of the London hospitals. At the beginning of the past year the governors resolved to require from every out-patient the sum of a penny for each attendance, and from every in-patient the sum of sixpence per week, "as a recognition merely of the benefits they receive from the charity." The result has been most satisfactory; the sums asked have been cheerfully paid, and with no appreciable effect either upon the number or character of the patients relieved. The past year was a year of incomplete work, owing to the alterations in the building; nevertheless, the sum realised amounted

to £120 7s. 5d., of which £91 14s. 11d. was due to the out-patients' pennies, and £28 11s. 6d. to the sixpences of the in-patients. Now that the hospital contains fifty beds, the income from this source cannot fail to amount to £200 a year, a sum nearly sufficient to cover the expense of medicines. "Every little helps" is a familiar proverb, but its truth is only realised in a case like this.

EFFECTS OF LIGATURE OF THE RENAL VEIN.

BUCHWALD and LITTON have described experiments performed with a view to demonstrate the effects of passive congestion and thrombosis of the renal veins. Their results are interesting, especially as they were able to trace the effects of such obstruction for periods varying from two to eight weeks. At first the affected kidney increases in size, the renal epithelium rapidly degenerates; hæmorrhages occur beneath the capsule and into the Malpighian tufts, and thrombi form in the renal veins. The capillaries outside the glomeruli are very dilated, those of the interior are, on the contrary, much narrowed. The swelling, œdema, hæmorrhages, and fatty degeneration, increase hourly, but no inflammatory changes ensue. About the sixth day after ligature, the kidney is noticed to be smaller than its fellow, and its diminution in size continues to proceed rather rapidly, and on the eighteenth day the difference in size is very evident, the tubules in the cortical portion of the affected organ being filled with degenerated epithelium. There is no trace of any interstitial nephritis, and an interesting feature is to be found in the glomeruli remaining quite intact, whilst the surrounding tubules have disappeared—a fact explained by the authors on the hypothesis that other channels than the radicles of the renal vein exist for the outflow of blood by the communication between the efferent venules and the capsular veins of the kidney. Indeed, in animals that long survive the operation, a considerable venous network is found between the capsule of the kidney and the vena cava, or the suprarenal or phrenic veins. The experiments, were undertaken with a view to, clear up the pathological sequence in two cases of fatty degeneration of the heart, in which, during life, the renal symptoms were those of congestion, but after death the kidneys were found to be in an advanced stage of cirrhosis. The results of the experiments, as bearing on these cases, showed that probably the interstitial change in the kidneys was the primary lesion, then fatty degeneration of the heart, and, lastly, passive venous congestion of the kidneys.

OVERCROWDING.

THE attention which has been drawn to this subject by the Bishop of Guildford and others will, we hope, be the means of remedying the evil complained of. It must not be forgotten, however, that the building of artisans' dwellings has been and is proceeding in various parts of London with commendable activity, and we are not disposed to take a gloomy view of the situation. Pending the erection of dwellings, we may learn a useful lesson from the municipal authorities in Glasgow, who have a greater degree of overcrowding to deal with than we have in London, and manage matters very much better. In Glasgow all houses under a certain size are under police inspection. Every door bears a ticket marked with the number of cubic feet of space contained in the dwelling, and the number of inhabitants it is licensed to contain. Three hundred cubic feet of space is allowed for each adult, and 150 for each child. Ordinary dwellings and lodging-houses are distinguished by the shape of the ticket.

The poor of Glasgow are in a much better condition than their London brethren in the matter of water-supply, for a constant supply is laid on to every floor of every dwelling; and, indeed, they are in most respects well cared for by the authorities, who exercise a continuous supervision over them. The Glasgow people have good lodging-houses and excellent people's restaurants, and we have shown in our Report on the City of Glasgow (October 30th, 1875) that a man may get capital lodging and excellent food in this northern city for a shilling a day, and that those who feed him and house him each make a handsome profit. We believe there is no need at present for State aid to provide dwellings for our artisans.

NEW MEDICAL OFFICER OF ST. PANCRAS WORKHOUSE.

CONSEQUENT upon the resignation of Mr. Hill, the medical officer of the workhouse, the St. Pancras guardians at their last meeting considered and adopted a report of the visiting committee with reference to filling the vacancy. As the result of general inquiry as to the amount of salary paid in other parishes, the committee recommended that the board should advertise for candidates for the appointment of resident medical officer of the workhouse, at a salary of £225 per annum, with board, apartments, and washing; the medical officer to provide a substitute whenever absent from the workhouse. Regret was expressed by one of the guardians that the salary had not been fixed at £300. On the other hand, an amendment was proposed to refer the report to the committee for re-consideration, with a view to the appointment of an out-door, instead of an in-door, medical officer. This amendment was lost on a show of hands. The guardians appear to be especially anxious to put a stop to what they consider the excessive number of inquests held in the workhouse. This will, perhaps, be best effected by an improvement in the system of nursing the sick paupers.

THE PRISONS BILL.

THIS Bill, as amended in committee, has recently appeared, and in this form will doubtless become law. The administration of these establishments is to be vested in the Home Secretary, but the duties of management will practically be performed by commissioners, whose number shall not exceed five, and who in their turn will be assisted by the present staff of prison inspectors, as well as other subordinate officers. The duties assigned to the future commissioners are of a very extensive and responsible character. They are, in fact, entrusted with all the administrative as well as financial (and, we assume, also sanitary) arrangements, and will present an annual report thereon to the Secretary of State. The Bill indicates that the present inspectors (two in number) will continue their duties as heretofore. The number and status of the commissioners are, it may be assumed, still undetermined; but it is reasonable to suppose that Mr. Cross will select a certain proportion of these officers from the ranks of the medical profession. So many medico-legal and sanitary questions crop up in connexion with our prisons, that some medical appointments would appear inevitable.

A ROYAL OFFERING.

HER ROYAL HIGHNESS THE PRINCESS OF WALES, a few days before her departure for the Continent, sent a valuable supply of flowers to the children's wards of the Charing-cross Hospital. It would be difficult to over-estimate the good influence of gifts of this nature in relieving the tedium experienced by the little sufferers, and so aiding in the work of restoring them to health. Patients, doctors, and nurses alike must feel the presence of flowers in sick wards enlivening and cheering, while there is every proba-

bility that the atmosphere of the rooms is directly purified by such means. The often demonstrated solicitude of the gracious lady who is now absent from our shores in the welfare of the inmates of the hospitals and infirmaries of the metropolis claims the warmest regard of the profession, and may be held out as an example to English ladies generally. Would it not be possible to form an association which should regularly supply the hospitals with cut flowers, newspapers, linen, &c.? There are hundreds of people with spare time on their hands who would gladly engage in such a work if it were systematically initiated, while it may safely be assumed that an abundance of the articles we have named would be forthcoming.

INFECTIOUS DISEASE HOSPITALS.

ISLEWORTH is reported to be in panic, because the Board of Guardians of the Brentford Union (of which Isleworth forms part) propose to build a small-pox and fever hospital of twenty beds within the garden of the workhouse, and for the use of paupers. Public "indignation meetings" have been held, the Local Government Board memorialised, and even the erring Board of Guardians has been waited upon by seven gentlemen, headed by a clergyman, in order that, if possible, a stop may be put to the building of the hospital. We have little doubt that the various agencies which have thus been placed in action to frustrate, if possible, one of the most important provisions of the sanitary laws are the same agencies which would be active, if it were necessary, to put public pressure upon the local authority for the abatement of any nuisance from filth. It would really be instructive to know how the educated people concerned in these movements to prevent the erection of infectious diseases hospitals, except where they would be useless, justify their proceedings. They cannot in any case show that these hospitals, when built in places of ready access, even if in the closest contiguity to other inhabited buildings, have not been other than an unmixed good in limiting the diseases they were intended for, and thus benefiting the surrounding population. Yet opposition is persisted in, in defiance of reason and experience. The fact is chiefly instructive as showing how extremely defective the sanitary education of the so-called "educated" classes still remains.

THE SURGICAL AID SOCIETY.

VIALS of wrath are being poured upon the heads of this Society by another Society—the "Charity Voting Reform Association." It appears, from a rather lengthy document with which we have been favoured, that the Surgical Aid Society derives subscriptions from the public amounting to nearly £3000 a year, and that it distributes its alms by means of letters, which the applicants for relief have to beg of the subscribers, each letter, if we understand rightly, representing a certain sum of money. The way in which this cumbersome method of doling out charity works is shown by the following extract from a letter "from a London clergyman," with whose name we are not favoured.

"The poor woman we spoke of the other day came to me on her crutches at church last evening. After three months' writing, and wandering up and down London, she had obtained twelve Surgical Aid letters. Finding these entitled her only to a leg without a foot, and that six more letters must be got, or fifty shillings in cash, she has had to fall back upon a local subscription, being weary of her toilsome pilgrimage. She assures me the cost of trains, omnibuses, &c., in begging for letters, has been 23s. 6d."

Of course this is an exceptional case, and in the majority of cases the letter, we suppose, covers the expense of the article needed. A much better way of distributing the charity would be to present the letters of recommendation to the large hospitals. We do not feel prepared to accept absolutely this statement of the Charity Voting Reform Association, and we must be allowed to state that there is something almost grotesque in this ponderous protest against the proceedings of a small London charity issued by another Society, and signed "Northumberland."

THE CROYDON WATER QUESTION.

A CONSPICUOUS instance of misguided local self-government now exists at Croydon, a district celebrated for campaigns in matters relating to public health. A Ratepayers' Sanitary Association has been formed, the members of which have, on the question of water-supply, come into woful antagonism with the Local Board of Health. It appears that the latter, disregarding many direct representations as to the insalubrity of the site, have sunk wells for public use, the water of which must inevitably become polluted with sewage before it reaches the surface. The water has of course been analysed, and, as is unfortunately too often the case, the various analyses, as made by different individuals, do not agree. Meanwhile a sum of more than £16,000 has already been spent, some of which has gone in "lining the wells," although, according to the report of the Sanitary Association, "the water is polluted before reaching the wells." A great deal of printed and other matter relative to this question has been forwarded to us, but, as it appears to us, the ratepayers of Croydon are sufficiently intelligent and sufficiently powerful to secure the election of men upon their Local Board who will look after sanitary interests in a proper and efficient manner, it seems bad policy and worse practice to create and maintain an association that may, and probably does, contain most of the intellectual acumen of the district, but is powerless to prevent useless expenditure or to inaugurate useful works.

THE BURIALS BILL.

THIS Bill, which has been brought into the House of Lords by the Duke of Richmond and Gordon, has for its main object the consolidation of the various existing Acts relating to places of burial, and to provide also more speedy and effective means for closing burial-grounds manifestly unfit, for sanitary reasons, for occupation. As to the latter procedure, the Local Government Board is constituted the ruling authority, and power is given to this department to close any burial-ground on a representation from the local authorities that it is injurious to the public health. There are 88 clauses in the Bill, and it appears that objection to many of these has already been taken by various local authorities and other bodies, chiefly in the provinces. We shall recur to the subject after the second reading of the Bill, when its sanitary aspects will be better understood and appreciated.

SANITARY REPORTS.

DR. WILLIAM ARMISTEAD, medical officer of health for six urban and rural districts around Newmarket, has recently presented a valuable and painstaking report, accompanied by a map indicating the actual and comparative death-rate in each district. No special incident appears to have occurred during the year. The want of hospital accommodation for cases of infectious disease is very properly insisted on, and is, as we know full well, the reiteration of a more than thrice-told tale. We have again to remind the health officers of combined districts that their reports would acquire great additional value if some uniform scheme of compilation were adopted and adhered to. As

things are now, every man does that which is right in his own eyes, and, no doubt, as a rule does excellently well. But system is necessary in sanitary as in other matters. It is at present absolutely impossible to collate and summarise the work of health officers throughout the country; and until this can be done, and done thoroughly, we shall never get beyond a fringe of information as to the actual or comparative good accomplished by the Public Health Acts.

CONCENTRATED LIME-JUICE.

THE letter of Mr. Otto Hehner, which recently appeared in our columns, reporting the result of some experiments (at the suggestion of Dr. Hassall) on the evaporation of lime-juice, is very interesting. According to Mr. Hehner, if the evaporation be performed carefully on a water-bath at a temperature of 60° C., or at a reduced pressure, none of the properties of lime-juice (except part of the aroma) are lost or impaired, and the resulting mass, when dissolved in the proper quantity of water, again forms a liquid identical in appearance and composition with the juice from which it was derived. The concentrated lime-juice can be easily pressed into moulds of proper size, and made, with sugar, into cakes, each corresponding to a dose of lime-juice. In its solid form it does not occupy more than a tenth or twelfth of the space of the original liquid. We shall look anxiously for information as to the therapeutical value of the consolidated juice.

HOW SMALL-POX IS SPREAD.

AMONG the numerous devices for spreading small-pox, which will excite the wonder of another generation, is, it appears, one not generally recognised. We are informed that no ambulance exists at the Highgate Small-pox Hospital for the conveyance of cases. Can it be the fact that this hospital has no ambulance, and, what would be equally surprising and unsatisfactory, that its patients who are not conveyed in cabs and omnibuses, have to negotiate for the use of the ambulance provided by the Fever Hospital, an arrangement by which time is lost and the chance of a double contagion secured? We take it for granted that such an arrangement will not survive exposure for one week. We believe that, owing to the careful disinfection of ambulances by the Fever Hospital authorities, no harm has been traced, but the absence of an ambulance at Highgate is incredibly preposterous.

CANCER OF THE RECTUM TREATED BY EXCISION.

AT the Strasburg Medical Society M. Koeberlé recently gave the particulars of a case of epithelioma of the lower two inches of the rectum, in which he had excised the diseased portion of the gut. The ulceration involved two-thirds of the circumference of the bowel, which was still mobile, and the recto-vaginal septum was unaffected. The case being deemed a very suitable one for excision, M. Koeberlé, after dilatation of the sphincter, and dividing the tissues in the posterior median line, made a circular incision at the margin of the anus, comprising the whole thickness of the coats of the intestine, which was then carefully dissected out of the surrounding cellular tissue, until the limits of the disease had been passed. Care was taken not to injure the peritoneum or vagina. The operation was completed by the removal of the lower segment of the intestine, and the stitching of the healthy part to the anus. No ligatures were found to be necessary, the bleeding from the numerous hæmorrhoidal vessels being sufficiently controlled by forceps. Six weeks after the operation the anus had again become naturally contracted; the motions were regular, and the rectal pain had completely disappeared. There was no recurrence of the disease.

THE GENERAL MEDICAL COUNCIL.

SUMMONSES have been issued for a meeting of the General Medical Council on Thursday, the 10th of May, at two P.M. The Executive Committee will meet on the two preceding days for the purpose of arranging the business of the Council. On account of so many matters of importance having been adjourned from last year, it is anticipated that the session will be prolonged over a fortnight.

BARON AMPHLETT.

THE following particulars of the illness of Sir Richard Amphlett are authentic. He was attacked with hemiplegia of the left side while in his study on the 3rd inst. On the preceding day he had been in his usual health, and attended the Worcestershire Quarter Sessions. The attack, which was at first partial, did not affect speech, intelligence, or sensation. At present Sir Richard maintains his general health, spirits, appetite, &c., and some return of motive power has shown itself in the leg, although not as yet in the arm. His physicians entertain a hope that the improvement, though perhaps slow, will be progressive.

THE PATHOLOGICAL SOCIETY.

THE next meeting of the Pathological Society, April 17th, will be of considerable interest. There will be two communications from Dr. Klein—one, on the "Minute Anatomy of Scarlatina;" and the second, on the "Anatomy of the so-called Pig Typhoid." Specimens will be under the microscope at 8 P.M. Dr. Braidwood will also communicate some of the results of his researches on the intimate pathology of contagion.

MEDICAL SOCIETY OF LONDON.

AT a meeting of the council held on Monday, the 9th inst., Mr. Francis Mason, F.R.C.S., Surgeon and Lecturer on Anatomy at St. Thomas's Hospital, was unanimously elected Lettsomian Lecturer for the next session. Mr. Mason will probably select as the subject of his lectures, "The Surgery of the Face, Mouth, and Throat."

MRS. RICHARD COBDEN.

THE statements which have been going the round of the daily press relative to the health of Mrs. Cobden, the widow of the illustrious Richard Cobden, are, we regret to learn, correct. Mrs. Cobden is suffering from serious organic disease, and her condition is a source of the deepest anxiety to her family and friends. In the course of the past week Dr. Richardson has visited Mrs. Cobden in consultation with Dr. Atwood, of Notting-hill, who is in regular attendance.

THE Brighton magistrates appear determined to enforce the provisions of the Vaccination Acts as far as lies in their power. Some days back several persons who had failed to comply with the previous order of the Bench to have their children vaccinated, were each fined twenty shillings and costs, or fourteen days' imprisonment. They were also informed that the penalty would be repeated until the requirements of the Acts were carried out.

THE Duke and Duchess of Edinburgh visited the Royal Naval Hospital, Malta, on the 24th ult., and were conducted over the establishment by Deputy Inspector-General John Bernard, R.N., and staff. Their Royal Highnesses afterwards honoured Dr. and Mrs. Bernard with their company at luncheon.

LAST year the number of suicides in France was 5617, of whom 4435 were men. Hanging was the measure resorted to by 2500 individuals, 1514 drowned themselves, 895 blew out their brains with firearms, 407 suffocated themselves with charcoal fumes, 129 swallowed poison, 154 threw themselves from public buildings, 13 elected to be cut to pieces under railway trains. The assumed causes stated in their order of frequency were as follows:—Insanity, drunkenness, physical suffering, domestic trouble, and fear of poverty. The greater number of suicides belonged to the class of peasantry.

A NATIONAL BAZAAR in aid of the building fund of the Livingstone Medical Missionary Memorial Institution will be held in Edinburgh in December next, under the special patronage of the Princess Louise. The institution will be devoted to the training of medical missionaries, and will perpetuate the name of Livingstone in connexion with the enterprise he so earnestly advocated.

DURING the month of March the deaths of 2993 persons were recorded in the eight principal towns of Scotland. The zymotic class of disease caused 346 deaths, being the lowest mortality in any month since the Registration Act came into operation in 1855.

THE public health of Cape Town is still very unsatisfactory. Scarlet fever continues to prevail, and it is stated by last advices that during the first ten days of March the death-rate rose to 68 per annum of the population.

SIR HENRY THOMPSON takes the chair at the anniversary dinner of University College, which is fixed for May 16th. The attendance of old students is requested, to revive interest in the College.

HER MAJESTY THE QUEEN has graciously accepted Mr. Henry Smith's Memoir of Sir William Fergusson.

PUBLIC AND PRIVATE VACCINATION.

IN a recent letter addressed to the President of the Local Government Board by Mr. Charles T. Pearce, a member of the Royal College of Surgeons, but an opponent of revaccination, were published some statistics purporting to show the number of successful vaccinations in England and Wales during the twenty-four years 1852–75, and the proportion of these successful vaccinations to births registered. The figures published by Mr. Pearce are thoroughly misleading, for instead of being, as he describes them, "numbers of persons successfully vaccinated," they are in reality only the number of persons successfully vaccinated by *public vaccinators*, and take NO account of those vaccinated by other medical practitioners. According to Mr. Pearce, the proportions of successfully vaccinated persons to births in 1873, 1874, and 1875 did not exceed 60·2, 58·4, and 58·5 per cent. respectively; if these proportions were correct it would follow that during those three years more than 40 per cent. of the children born were not successfully vaccinated. These figures are undoubtedly acceptable to the opponents of vaccination, who have been much disconcerted by the calculated rates of mortality from small-pox among vaccinated and unvaccinated children aged between one and five years in London, published by the Registrar-General in his weekly returns. These calculations were based upon the assumption that 92 per cent. of the children living in London at these ages have been successfully vaccinated. If the numbers of unvaccinated are as shown by Mr. Pearce, and not as calculated by the Registrar-General, the rate of mortality from small-pox among the unvaccinated would be over-stated. It is desirable, therefore, to point out the extent of error in Mr. Pearce's figures. They are taken from the fifth annual report of the Local Government Board (page 364), and are correctly reproduced, with the important exception of the omission of the words "by the public vaccinators" in the heading to the table. Previously to the Vaccination Act of 1871 there existed no means for recording the number of vaccinations performed by medical practitioners other than public vaccinators; but since 1871, all successful vaccinations are reported to, and recorded by, the vaccination officers appointed by the several boards of guardians. Up to and including 1872, however, the returns of successful vaccinations by public vaccinators made no distinction between primary vaccinations and revaccinations, and in the course of the epidemic of 1871–2 the proportion of revaccinations was very considerable. Neither did the Local Government Board Reports afford the means for ascertaining the numbers of successful primary public vaccinations performed upon infants under one year of age, and upon children and others over that age, in any year prior to 1873. The returns for 1873 are therefore the earliest which enable the numbers of children respectively vaccinated by public vaccinators and private practitioners to be estimated. As Dr. Seaton's digest of the vaccination returns for 1874 is not yet published, 1873 is the only year for which the requisite facts are available. Mr. Pearce states in his letter to the President of the Local Government Board that only 501,189 persons were successfully vaccinated in 1872, or equal to 60·2 per cent. upon the number of births. The true number of primary public vaccinations under one year of age was indeed only 469,538. It appears, however, from Dr. Seaton's complete digest for the year, that the true number of successful infant vaccinations was 704,666, from which it may be inferred that 235,128 children born in 1873 were vaccinated by private practitioners. Thus, of the children born in that year, no less than 85 per cent. were successfully vaccinated, instead of the 60 per cent., as stated by Mr. Pearce, and of the number successfully vaccinated only 67 per cent. were vaccinated by public vaccinators, and 33 per cent. by other medical practitioners. It should also be stated that, in addition to the 85 per cent. of the children born in 1873 that were successfully vaccinated, nearly ten per cent. died previously to the usual vaccination age, and that less than five per cent. were left unaccounted for. So far as may be judged by the imperfect figures at present published relating to the vaccinations in 1874 and 1875, it would appear that the proportion of *public* to total vaccinations is declining. We can, however, but regret that the Local Government Board should find it impossible to publish their complete vaccination digests until more than two years after the close of the year to which they relate.

THE ROYAL COLLEGE OF SURGEONS.

AT a quarterly meeting of the Council, held on Thursday last, the resolution that certificates of attendance on lectures and dental hospital practice shall not be received from any lecturer who does not hold a registerable surgical qualification was again referred to a committee. The minutes of the preceding meeting, relating to the question of giving effect to Russell Gurney's Act, were confirmed. What the resolutions were we are unable positively to state in consequence of a determination on the part of some of the members of the Council to preserve them private and confidential. It is, however, rumoured that the general tenour of the resolutions is against the admission of women to the membership or fellowship of the College, although the Council is not unwilling, separately or in conjunction with the conjoined authorites, to consider the advisability of admitting them through some other registerable title. Through the adoption of Mr. Hancock's motion, the Conjoint Scheme, when complete, will require to be again discussed in its legal bearings. The Jacksonian Prize, for the best essay on the Treatment of Cancer of the Rectum, was awarded to Mr. Harrison Cripps. The subject for the next Jacksonian Prize Essay is Glaucoma. The subject for the next College Triennial Prize is the Physiology and Injuries of the Third, Fourth, and Sixth Cranial Nerves.

Correspondence.

"Audi alteram partem."

VACCINATION.

To the Editor of THE LANCET.

SIR,—With reference to the annotation headed "The Detractors of Vaccination," in your number of this day's date, in which you state that you "are constantly receiving communications from sensible folk asking advice as to the replies they shall make to those curious people who decry vaccination," I beg to submit the following facts, being to my mind amongst the strongest and most convincing of the many indisputable proofs of the efficacy of vaccination, not only as a preventive of small-pox, but as a decided mitigator of the disease if performed soon after an unprotected person is exposed to infection or contagion.

In the year 1862, while in charge of a brigade of Royal Artillery at Woolwich, one of twelve men under my treatment for other diseases in one of the wards of the Garrison Hospital became attacked by small-pox. I had him immediately removed, and on inspecting the remaining eleven men I found that nine bore satisfactory marks of vaccination, but that the two others bore no traces whatever. On procuring some lymph two days subsequently, I vaccinated those two men. The vaccination ran a thoroughly successful course, and everything went on well until the eleventh day from the operation, and the thirteenth from the occurrence of the case of small-pox, when this latter disease appeared on both the men; but although it had had two days' start of the vaccination at the least, yet, such was the modifying effect produced by it, that the disease was of a most mild character, and left no pitting whatever, while the man from whom they were infected had an ordinary attack of a semi-confluent nature, he never having been vaccinated.

Now here were twelve men in the same ward, and all apparently subjected to precisely similar influences. The nine who bore vaccination marks all escaped, while the three who had no marks got small-pox.

I am, Sir, your obedient servant,

J. R. MILLER LEWIS, M.D.,
Deputy Surgeon-General.

Finborough-road, South Kensington, 7th April, 1877.

NEW DILATING SPECULUM AURIS.

To the Editor of THE LANCET.

SIR,—We beg to introduce to the notice of your readers a new dilating speculum auris which we have recently constructed on the model of the tracheotomy canula designed by Mr. Wagstaffe, and described recently in the medical journals.

This instrument, being expanded by a series of levers acted upon by a large milled head, is handy, entirely under control as to the extent of dilatation, and so arranged as not to interfere with the vision, and, having a large external orifice, well polished, is capable of being highly illuminated, and affords a very distinct view of the meatus.

We are, Sir, your obedient servants,

Birmingham, April, 1877. SALT AND SON.

THE FELLOWSHIP OF THE ROYAL COLLEGE OF SURGEONS.

To the Editor of THE LANCET.

SIR,—All who are interested in the success of the new regulations at the College owe a debt for gratitude to Professor Humphry for the long and able explanation of his motion. Allow me to ask and answer two questions, and in this way to state humbly my opinion.

Will it be to the advantage of the College and of benefit to the profession to increase the number of Fellows?—Yes, if the character of the examinations is not altered.

How is it to be done without lowering the standard?—By admitting the members who have reached the age of twenty-five years to the examinations. Let the examinations alone be the test of surgical knowledge and skill.

I am, Sir, your obedient servant,

A JUNIOR MEMBER.

PARIS.

(From our own Correspondent.)

A visit to the Hospice de la Salpétrière—Experiments on metallotherapy—Professor Charcot's Wards—Treatment of ovarian hysteria—Monobromide of camphor and bromide of zinc in hysteria.

YESTERDAY morning a large party met at the Hospice de la Salpétrière to witness various experiments made in metallotherapy by Professor Charcot and Dr. Burg. During the last twenty years Dr. Burg has been labouring to convince the profession of the physiological and therapeutical effects of metals applied to the body or taken internally. He has given to the *ensemble* of his views and observations the name of metallo-therapy, and thus elaborated a regular method of therapeutics.

Of course the curative action of metals taken internally is universally known, and iron, arsenic, and other substances are daily administered by practitioners. As to the external applications of metals for remedial purposes, though advocated at various periods by Paracelsus, Perkins, Pomme, &c., they have never been generally employed or admitted as useful by the profession. Now, Dr. Burg believes that according to the idiosyncrasy of individuals the application of various metals has the effect of increasing the sensibility of the skin where they are applied, or of restoring sensibility when it is lost, and he asserts that these applications eventually have a curative action. Moreover they have the invaluable property of showing, each metal according to the particular idiosyncrasy of the patient, to what metals individuals are susceptible or amenable, and, consequently, what metals should be employed internally and externally. Thus the mere application of copper-plates may affect the cutaneous susceptibility of patients who will remain unaffected by iron, or zinc, or arsenic, and *vice versâ*, showing the peculiar idiosyncrasy of the individual and the metal he wants. All these views and assertions of Dr. Burg are based on observations made in his own practice, or in the Paris hospitals, in cases of hysteria, epilepsy, gastralgia, chlorosis, dysmenorrhœa, &c. &c. Coupled with these observations are his statistics on the immunity from cholera of workmen employed in copper works, showing the effects of copper on the system. He also applies his method to the use of mineral waters, with the object of making out distinctly the special sort of water that suits each person.

Such is the *ensemble* of Dr. Burg's views, to which he has been earnestly and persistently for the last twenty years drawing the attention of the medical public. Professor Charcot has determined to give them a fair trial, and it was to assist at a first series of experiments that we met on Monday at La Salpétrière. I may mention that Dr. David Ferrier, of London, who is on a visit to Paris, and who has given especial attention to the wards of Dr. Charcot; Professor Béclard of Paris; Dr. Bourneville; Mr. Crawford, of the *Daily News*; and several other medical men and writers for the press, were present on the occasion. The experiments carried on were for the purpose of discovering the action of

external applications on the skin of hysterical subjects affected with hemi-anæsthesia. Three or four women suffering from inveterate chronic hemi-anæsthesia were chosen for the purpose. Needles were run through their skin without the slightest feeling or evidence of pain. Strings of simple copper plates were then applied to the leg, the arm, the head, the nose, the tongue of the patients, &c., and after a lapse of time, varying between ten minutes and half-an hour, there were evident traces of the return of sensibility in the neighbourhood of the copper plates. The patients, whose eyes were carefully bandaged, felt the pricks of the needles; the punctures brought blood to the skin; the sense of smell, which had been dead, was revived in one of the nostrils; the taste of colocynth, applied to the deadened half of the tongue, was perceived to be very bitter, &c.

This is a mere statement of the first experiments made. Of course, a great many further and crucial experiments have to be performed, and Dr. Charcot is too careful an observer to commit himself to any premature conclusions. Nevertheless, these first experiments proved interesting.

Whilst we were in the wards we had occasion to see various cases of interest. We were shown a hysterical woman, most remarkable for her hemi-anæsthesia and other symptoms, who had gone to Belgium on foot, begging her bread as she proceeded, to see the famous Louise Lateau. We also had the opportunity of seeing Dr. Charcot apply his method of stopping a fit instantaneously in women affected with "ovarian hysteria." Two women fell into a fit, and Dr. Charcot by applying pressure with the hands to the diseased ovary arrested the paroxysm almost immediately.

Dr. Bourneville, who accompanied me on my visit, spoke of the various new substances which he is now trying under the direction of Dr. Charcot in cases of nervous disease, and especially of nitrite of amyl, bromide of camphor, bromide of sodium, and bromide of zinc. He is still very well satisfied with the effects of bromide of camphor since his first researches on the drug. It is administered largely at La Salpétrière, in the form either of Clin's capsules or of enemata. In a great number of epileptic cases it has been found to diminish the vertigo most notably, and to diminish in a good many cases the number of fits. It has rendered considerable service in the delirium which follows the fits in epileptic mania, and has proved very useful in hysteria. I have been promised Dr. Bourneville's observations on the other drugs I have mentioned. I cannot conclude, however, without remarking that the hydropathic and bathing arrangements of such a large and special establishment as La Salpétrière seem scanty and insufficient. This part of the hospital arrangements is so very important in the treatment of nervous affections that it is strange that the Assistance Publique does not understand the good, and even the saving, that would result from greater liberality in the supply of baths.

Paris, April 4, 1877.

PARLIAMENTARY INTELLIGENCE.

HOUSE OF COMMONS.

Friday, April 16th.

HANGING.

In answering a question addressed to him by Mr. FORSYTH, in reference to the recent execution at Leeds, Mr. Secretary CROSS expressed an opinion "that death by execution as carried out under the present form is as speedy and painless as under any that could be devised.

THE ARCTIC EXPEDITION INQUIRY.

Mr. EGERTON informed Captain Bedford Pim, that the Report of the Committee on the outbreak of scurvy in the Arctic Expedition "would, he hoped" be very soon laid on the table.

THE WATER QUESTION.

On going into Committee of Supply, this fertile but hitherto futile topic was discussed at length with no result beyond further publicity and proof that the Government will do nothing substantial until coerced by the growing force of public opinion.

FACTORIES AND WORKSHOPS.

Mr. Secretary CROSS brought in his Bill to consolidate and amend the statutes affecting Factories and Workshops.

Monday, April 9th.

SANITARY CONDITION OF PORTSMOUTH.

In answer to Mr. Macdonald, Mr. SCLATER-BOOTH said his attention had been called to the report of Dr. Thorne, which was a very important and interesting one, as to the sanitary condition of Portsmouth. The gist of that report was not that there had been any actual spread of scarlet fever in Portsmouth in consequence of the practice of tailors making clothes in their own homes, but was to the effect that the authorities ought to provide further accommodation with a view to the isolation of the disease in its early stages. The two cases of the tailors to which the hon. member had referred were specially alluded to by Dr. Thorne, who might have gone further and given other cases. He had been in communication with his right hon. friend the Secretary of State on the subject, and he was not aware that at this moment there was anything which would show the necessity for taking further steps in the matter.

BRITISH MEDICAL DEPARTMENT.

Dr. PLAYFAIR asked the Secretary of State for War when paragraph 25 of the British Medical Department Code (India)—viz., "In order to be qualified for holding an administrative appointment in this country (India) it is required that an executive medical officer should have served as a surgeon for three years with an European regiment in India"—was made general in its application, and whether there were any medical administrative officers now holding appointments who had not complied with the condition of paragraph 25.

Mr. HARDY.—It was not made general until the issue of the Warrant of 1876, but it must have been perfectly well known throughout the Department, because in 1867 it was necessary to pass over sixty or seventy officers to obtain the requisite number for India who had the qualifying service. With regard to the second part of the question, there are medical administrative officers now holding appointments who have not complied with the condition of paragraph 25, for the necessities of India having been supplied, some of the officers who were then passed over, as above stated, were promoted to administrative rank at home and in the colonies. The effect of this was really unfair, as it gave some men long tropical service, and others an undue amount of home service, and so interfered with the roster; and, therefore, last year I considered it advisable, with the concurrence of his Royal Highness, to establish one system for promotion—viz., by selection, one of the elements of which was the necessity of having three years' Indian service. This does not in the least set aside the conditions of paragraph 16 of the Royal Warrant of 1876, which lays down ability and merit as qualifications for promotion, as opposed to seniority, but not as excluding other grounds for non-selection—such as ill health, inability to perform tropical service, &c.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen passed the primary examination in Anatomy and Physiology at meetings of the Board of Examiners on Monday, Tuesday, and Wednesday last:—

Henry E. Garrett and S. F. Newton, Charing-cross Hospital; T. H. Pope, Edinburgh; E. M. Butcher, H. T. Bowman, J. P. Elliott, T. C. Square, and J. R. Dodd, Newcastle-on-Tyne; A. C. Rich, G. J. Jones, R. Brodin, G. Rice, A. Houlgrave, and Alfred Meeson, Liverpool; H. Payne, A. C. Pownall, I. C. Staley, Wm. A. Marsh, W. E. Boulter, S. Mac M. Challinor, O. Withers, James Chronnel, James Wood, T. H. Hayle, G. H. Withington, and Thomas Mellor, Manchester; J. Whitehouse, Cornelius W. Suckling, H. T. Bassett, and J. C. Grinling, Birmingham; F. S. Peek and H. E. R. Wobrige, Bristol; R. Hagyard, J. W. Oglesby, N. Parritt, and G. H. Barton, Leeds; G. D. Pidcock, F. Dale, and J. H. Lilley, Cambridge; H. W. G. Triggs, Edinburgh and Middlesex Hospital; A. L. Smith, Laval University and Guy's Hospital; J. Ransohoff, M.D. Ohio; Samuel Goss, St. George's, London, and Charing-cross Hospitals; R. Pemberton, Madras and Guy's Hospital; C. Cotton and A. B. Cottell, St. George's Hospital; J. F. J. Morrison and H. H. Austen, Guy's Hospital; E. Alban, T. Kirsopp, and E. M. Pearless, St. Bartholomew's Hospital; C. E. Thompson and Charles Lucas, Middlesex Hospital; F. T. Hebb, Theodore F. P. Adolphus, and D. M'Donnell, King's College; John Rees, H. P. Miller, and W. Falla, University College; C. A. Ballance, A. Newsholme, R. C. Benington, and T. D. Savill, St. Thomas's Hospital.

Of the 72 candidates examined on the above-named days, 9 failed to satisfy the Board, and were referred for three months' further anatomical and physiological study.

APOTHECARIES' HALL. — The following gentlemen passed their examination in the Science and Practice of Medicine and received certificates to practise on April 5th:—

Brown, John, Marylebone-road.
Hicks, Frederick John, University College.
Leahy, Albert William Denis, Oxford-street.
Middleton, Charles Frederick, Russell-road, Finsbury-park.
Smith, Ferdinand Clarence, Brentford.
Taylor, Harold Gilbertson, Queen's-road, Birmingham.
Wheler, John Mordaunt, Matlock-bridge.

The following gentlemen also passed the Primary Professional Examination:—

Charles John Carrol Otway, Guy's Hospital; William Gladstone Reid, King's College; Brian Rigden, University College.

HENRY FITZGIBBON, M.D., of Clondalkin, has been placed on the Commission of the Peace for the county of Dublin.

THE Directors of the West of Scotland Convalescent Seaside Homes, at Dunoon, have resolved to add another wing, at an expense of £4000.

AT a meeting of medical men of the West of Scotland, held at Glasgow, it has been determined to petition in favour of Dr. Cameron's Habitual Drunkards Bill.

MR. BERWICK, late President of Queen's College, Galway, has been succeeded by the Vice-President, Mr. Moffett.

ONLY 19 deaths from zymotic diseases were registered last week in Dublin, but the total deaths exceeded the births by 43, and represented an annual mortality of 41·0 per 1000.

DR. ALBERT BAKER has been presented with a gold watch, two silver salvers, and an illuminated address, as an acknowledgment of his valuable and gratuitous services to the Dawlish Dispensary for upwards of twenty years.

A SPECIAL MEETING of the Charity Organisation Society will be held at the rooms of the Society of Arts, John-street, Adelphi, on Tuesday, April 17th, Dr. H. W. Acland in the chair, when Sir Charles Trevelyan, Bart., will read a paper.

ROYAL INSTITUTION. — James Dewar, F.R.S.E., Jacksonian Professor of Natural Experimental Philosophy in the University of Cambridge, has been elected Fullerian Professor of Chemistry, in the room of Dr. Gladstone, resigned.

NORTHERN COUNTIES ASSOCIATION OF MEDICAL OFFICERS OF HEALTH.—At the spring quarterly meeting of this Association, to be held in the Town Hall, Darlington, on Tuesday, April 17th, Mr. J. M. FOX will give a demonstration of the use of the Slide Rule in the preparation of Vital Statistics; and Dr. J. C. Reid will read a paper "On some of the Occult Causes of Infant Mortality." The members and friends of the Association will subsequently dine together at the King's Head Hotel, at 5 P.M.

ILKLEY CHARITY HOSPITAL.—The report read at the annual meeting of the friends of this institution, held last week, was on the whole of a satisfactory character. The number of patients during the past year was 688, against 720 in the previous twelve months. The total receipts amounted to £1148 19s., and the expenditure to £964 7s., thus leaving a fair balance in the treasurer's hands. Noteworthy features of the medical officer's (Dr. Call's) statement were the facts that no death occurred in the hospital during the year, and that of the 688 patients, 609 were discharged cured; results which, whilst highly gratifying to the supporters of the institution, speak loudly as to the benefit it confers on the community in its neighbourhood.

BEQUESTS &C. TO MEDICAL CHARITIES.—Admiral Sir Burton Macnamara bequeathed £500, and the Prince of Wales has given £50, to the Seamen's Hospital, Greenwich. The Clothworkers' Company have given £250 to the building fund of the Metropolitan Free Hospital. The Duke of Westminster and Mr. J. Manship Norman have each given £100 to the Charing-cross Hospital Extension Fund. Alderman Sir Robert Carden, Mrs. Turner, and Mr. James H. Anderdon have each given £100 to the Repairs and Improvement Fund of the Westminster Hospital.

BOOKS ETC. RECEIVED.

Transactions of the National Association for the Promotion of Social Science. 1876.
Dr. D. Manson: The Strathpeffer Spa.
Dublin Journal of Medical Science.
R. Williams and A. Fisher: Hints for Hospital Nurses.
Dr. P. Blakiston: Modern Society.
Dr. Lawson on Sciatica, Lumbago, and Brachialgia.
Bentley and Trimen's Medicinal Plants. Part XIX.
Hutchinson's Illustrations of Clinical Surgery.
Drs. Gardner and Osler on Pernicious Anæmia.
Veterinary Journal. April.
Dr. Robinson: Effusion of the Pleura.
Dr. J. Sullivan: Endemic Diseases of Tropical Climates.
The Popular Science Review. April.
The Practitioner. April.
Work in Brighton.
Horford's Alleged Defects in the Office of Coroner.
Dr. J. Morton on Spina Bifida.

Medical Appointments.

ATKINSON, F. E., L.R.C.P.I., M.R.C.S.E., has been appointed Resident Medical Officer to the Bradford Infirmary and Dispensary, Yorkshire, to visit Dispensary Patients at Home, vice Appleyard, resigned.

BARRATT, O. W., L.R.C.P.Ed., M.R.C.S.E. & L.M., L.S.A.L., has been appointed a Medical Officer to the Birmingham and District Hearts of Oak Medical Association.

CHERRYWRIGHT, J. F., L.R.C.P.Ed. & L.M., M.R.C.S.E., has been re-appointed Medical Officer of Health for the Greasbrough Urban Sanitary District, Yorkshire.

COCHRANE, J., M.B., has been appointed an Assistant-Surgeon to the Newcastle Dispensary, vice Monteith, appointed Resident Medical Officer.

COLLIER, N. C., L.R.C.P.Ed., L.S.A.L., has been appointed Medical Officer of Health for the Fulham District, vice Burge, superannuated.

COLLINS, F. H., M.D., M.Ch., L.R.C.S.I., has been appointed House-Surgeon to the Hulme Dispensary, Manchester, vice Jones, resigned.

CROCKER, Dr. H. B., has been appointed an Assistant-Physician to the East London Hospital for Children, Shadwell, vice Leftwich, resigned.

CURTIS, J. G., F.R.C.S.I., L.R.C.P.Ed., has been appointed a Surgeon to the South Charitable Infirmary and County Hospital, Cork, vice Gregg, deceased.

DONKIN, Dr. H. B., has been appointed Physician to the East London Hospital for Children, Shadwell, vice Magrath, resigned.

DRURY, R. J., M.D., L.R.C.S.I., has been appointed a Medical Officer to the Birmingham and District Hearts of Oak Medical Association.

EDGELOW, T., L.R.C.P.I., M.R.C.S.E., has been appointed Dentist to St. George's Hospital, vice Vasey, resigned.

FITZGERALD, E., L.R.C.P.Ed. & L.M., L.R.C.S.I., L.A.H.D., has been appointed Medical Officer, Public Vaccinator, &c., for the Rahan Dispensary District of the Mallow Union, co. Cork, vice McDonald, deceased.

GOOD, J., M.R.C.S.E., L.S.A.L., has been reappointed Medical Officer of Health for the Dorchester Urban Sanitary District.

GOODSALL, F. W. W., M.R.C.S.E., L.S.A.L., has been appointed Resident Surgeon to the Farringdon Dispensary, Bartlett's-buildings.

GWYNNE, C. N., M.B., C.M., has been appointed Lecturer on Practical Physiology at the Sheffield School of Medicine, vice Thomas, appointed Joint Lecturer on the Principles and Practice of Medicine.

HOPKINS, F. F., L.R.C.P.Ed. & L.M., M.R.C.S.E., L.S.A.L., has been appointed a Medical Officer to the Birmingham and District Hearts of Oak Medical Association.

JONES, H. MacNaughton, M.D., C.M., F.R.C.S.I., F.R.C.S.Ed., has been appointed an Assistant-Surgeon to the South Charitable Infirmary and County Hospital, Cork.

JONES, V. D. W. B., M.R.C.S.E., L.R.C.P.Ed., has been appointed an Honorary District Surgeon to the Royal South London Dispensary for the Walworth District, vice Hogg, resigned.

LANE, W. L., M.B., C.M., has been appointed Medical Officer to the Ashington Colliery Provident Medical Society, Morpeth.

LITTLE, J., M.D., L.R.C.S.Ed., has been appointed Medical Officer and Public Vaccinator for the Parish of Annan, Dumfriesshire, vice Ewart, deceased.

MCCLURE, H., M.D., C.M., has been appointed Medical Officer to the Cheriton-Fitzpaine District of the Crediton Union, vice Broom, resigned.

MALCOMSON, J. A., M.D., has been appointed Medical Officer for No. 3 District of the Middlesborough Union, vice Pearson, non-resident.

MILLER, F. D., L.R.C.P.I., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer for No. 3 District of the Basingstoke Union, vice Webb, deceased.

NORMAN, J. C., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer and Public Vaccinator for the Hadleigh District of the Samford Union, and the Second Division of the Hadleigh District of the Cosford Union, and Medical Officer of Health for the Kersey Sub-district of the Cosford Rural Sanitary District, vice Muriel, deceased.

OXFORD, W. C., M.R.C.S.E., L.S.A.L., has been appointed Resident House-Surgeon to the Hull and Scalcoates Dispensary, vice James, resigned.

PATERSON, R. H., F.C.S.S., has been appointed Professor of Botany at Anderson's University, Glasgow, vice Hennedy, deceased.

PEELE, E., L.K.Q.C.P.I. &c., has been appointed Physician to the Hospital for Incurables, Dublin, vice Perceval, deceased.

PINNELL, T. M., M.B., has been appointed Physician's Assistant and Pathologist to the Wolverhampton and Staffordshire General Infirmary.

ROWE, Mr. G. H., has been appointed Surgeon's Assistant to the Wolverhampton and Staffordshire General Infirmary, vice Weekes, whose appointment has expired.

RUSSELL, A. P., M.B., C.M., has been appointed Assistant-Physician to the Crichton Royal Institution, Dumfries, vice Murchison, appointed an Assistant Medical Officer to the Middlesex Lunatic Asylum, Banstead Downs.

SAUNDERS, C. E., M.D., M.R.C.S.E., has been appointed Medical Officer of Health for the St. Albans Rural Sanitary District, vice the District Medical Officers whose appointments have expired.

SMITH, C. J. H., M.B., M.R.C.S.E., L.S.A.L., has been appointed Medical Attendant to the Jewish Convalescent Home, South Norwood, vice Roberts, deceased.

SWEETING, R. B., M.R.C.S.E. & L.M., L.S.A.L., has been appointed Medical Officer to the Basingstoke Union Workhouse, vice Webb, deceased.

TANNER, C. K., M.D., C.M., L.R.C.S.I., L.K.Q.C.P.I., has been appointed an Assistant-Surgeon to the South Charitable Infirmary and County Hospital, Cork.

TAPLIN, J. F., M.D., has been appointed a Medical Officer to the Birmingham and District Hearts of Oak Medical Association.

TRAILL, J. W. H., A.M., M.B., C.M., F.L.S., has been appointed Professor of Botany at the University of Aberdeen, vice Dickie, resigned.

VINRACE, J., M.D., M.R.C.S.E., L.S.A.L., has been appointed a Medical Officer to the Birmingham and District Hearts of Oak Medical Association.

WARNER, Dr. F., has been appointed an Assistant-Physician to the East London Hospital for Children, Shadwell, vice Leftwich, resigned.

WHITE, E., M.D., M.R.C.S.E., L.S.A.L., has been appointed a Medical Officer to the Birmingham and District Hearts of Oak Medical Association.

WILLIAMS, E. H., L.R.C.P.Ed., M.R.C.S.E., has been appointed Resident Medical Officer to the Lewes Dispensary and Infirmary, vice Davis, resigned.

WILLIAMS, W., M.D., has been appointed a Physician to the Stanley Hospital, Liverpool, vice Whittle, resigned.

WORSLEY-BENISON, H. W. S., F.L.S., has been appointed Lecturer on Botany at Westminster Hospital, vice Holmes, resigned.

Births, Marriages, and Deaths.

BIRTHS.

BOTT.—On the 4th inst., at Stoke Newington, the wife of Charles Glen Bott, M.R.C.S.E., Assistant-Surgeon, Colonial Hospital, Georgetown, Demerara, of a son.

CLARK.—On the 9th inst., at Cavendish-place, London, the wife of Andrew Clark, F.R.C.S., of a daughter.

HARVEY.—On the 3rd inst., at Upper Merrion-street, Dublin, the wife of Reuben J. Harvey, M.D., of a son.

LITTLEJOHN.—On the 2nd inst., at Royal Circus, Edinburgh, the wife of H. D. Littlejohn, M.D., of a daughter.

MCDONALD.—On the 7th Feb., at Hamilton, Tasmania, the wife of Wallis McDonald, M.R.C.S. &c., of a daughter.

ROGERS.—On the 31st ult., at Hanover-square, the wife of Joseph Rogers, M.R.C.S.E., of a son.

SMITH.—On the 4th inst., at Coxwold, Easingwold, the wife of J. W. Smith, M.R.C.S.E., of a daughter.

TAYLOR.—On the 5th inst., at Johnstone, Renfrewshire, the wife of M. H. Taylor, M.B., of a daughter.

MARRIAGES.

DAVIES—FELTOE.—On the 12th inst., at Holy Trinity Church, Kilburn, by the Vicar, the Rev. G. Despard, M.A., assisted by the Rev. W. Venables Williams, M.A., Vicar of Llandrillo-yn-Rhos, *Dr.* Thomas Davies, of Colwyn Bay, North Wales, to Sarah Ann Dutton (Lillie), eldest daughter of F. F. Feltoe, of Heworth House, Kilburn, and Albemarle-street, London.

PHILPOT — NEEDHAM. — On the 5th inst., at St. Michael's, Chester-square, Joseph Henry Philpot, M.D., to Isaline, daughter of Joseph Needham, Esq.

WILLS—GLOVER.—On the 4th inst., at St. Peter's Church, Dublin, by the Rev. S. R. Wills, M.A., Rector of Rathkeale, and the Rev. Canon Wills, M.A., Rector of Mallow (brothers of the bridegroom), Dr. Thomas M. Wills, F.R.C.S.I., of Bootle, Liverpool, to Lizzie Hannah, eldest daughter of the late Surgeon-Major Glover, H.M. Indian Army.

DEATHS.

CLOUTING.—On the 5th inst., at Shipdham, Norfolk, John Revett Clouting, M.R.C.S.E. & L.S.A., aged 62.

CRUMPE.—On the 1st inst., at Tralee, Francis Crumpe, M.D.

HAWKINS.—On the 4th inst., at Hunslet, Leeds, Henry Baillie Hawkins, M.R.C.S.E., aged 29.

HAY.—On the 4th inst., at Bridport, Dorset, Mary, wife of William Henry Hay, M.D.

HUGHES. — On the 4th inst., at Endon, William Frederick Hughes, M.R.C.S.E., aged 40.

JEFFERSON.—On the 5th inst., at Hencotes, Hexham, Thomas Jefferson, Surgeon (in practice prior to 1815), aged 93.

JERRARD.—On the 29th ult., at Honiton, John Clapcott Jerrard, M.R.C.S.E., aged 83.

MARTIN.—On the 2nd inst., at The Limes, Walkden, Jane, the beloved wife of William Young Martin, F.R.C.S.Ed., in her 34th year.

O'LEARY.—At sea, on the homeward passage from New Zealand, Louis J. O'Leary, L.R.C.S.I.

PRICE.—On the 24th ult., at Glantwrch, Swansea Vale, William Price, M.R.C.S.E., aged 74.

ROBB.—On the 31st ult., at Marlborough-road, Marylebone, Peter Robb, M.D., aged 69.

RONALD.—On the 5th inst., at St. George's-road, Glasgow, James Ronald, Surgeon, formerly of the Hon. E.I.Co.'s Service, aged 80.

THORNTON.—On the 4th inst., at Dewsbury, Peter Thornton, M.D., aged 76.

WILLIAMS.—On the 9th ult., at Llansaintffraid, Conway, William Morgan Williams, L.R.C.P.Ed., aged 44.

[N.B.—*A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.*]

Notes, Short Comments, and Answers to Correspondents.

THE EX-EMPRESS CHARLOTTE.

WE have followed from time to time the successive phases of the mental malady of the widow of Maximilian, the ill-starred Emperor of Mexico; and the melancholy interest her case inspires seems rather to increase than to diminish. The first symptoms of her disorder were those of exaltation of consciousness, prompting her to write autograph letters to the Pope, to several of the crowned heads of Europe, and to her husband, of whose fate she was ignorant. Receiving no reply, she was the victim of the most anxious expectancy; and so importuned with questions the numerous visitors to the château of Lacken, where she resided, that she had to be removed to the château of Tervueren by the advice of Dr. Delhaye. There she calmed down; but, finding her stay compulsory, she made many attempts to escape. She did manage on one occasion to elude the vigilance of her attendants; but was overtaken and brought back to her apartments by showing before her at intervals the flowers of which she is passionately fond. She is now under the care of Dr. Bulkens, and employs her time in drawing and writing. For some time her husband's death was concealed from her; but when the news was at last broken to her, she received it with a firmness of nerve that surprised her relatives and attendants. During the period of emotional and intellectual exaltation, she became fat, even to *embonpoint*; and (interesting to note) in her calmer phase she lost flesh considerably. She is haunted by the fear that she will be poisoned. The Queen of the Belgians visits her twice a week, and at longer intervals her brothers, the King and the Count of Flanders. Her recovery is pronounced by her physicians to be hopeless; but the record of her case, which is kept, and will one day be published, will none the less be full of psychological and practical interest.

Mr. Anderson.—We never recommend a physician or surgeon.

CASE OF ARM PRESENTATION REQUIRING THORACIC EMBRYULCIA AND DISARTICULATION AT THE SHOULDER-JOINT.

To the Editor of THE LANCET.

SIR,—I was called by a midwife to attend MRS. M——, aged thirty-eight, in her ninth confinement. I found the os well dilated, but high up, and the left arm of a large child presenting. The membranes had ruptured thirty-two hours previously. On attempting to turn, the right foot could just be felt very high up, but kept slipping from the fingers, and could not be brought down, because the uterus was very firmly contracted on the child, and the pains were very strong and frequent. The patient was then put under chloroform, and another attempt made to turn; but unfortunately dangerous symptoms appeared, and the inhalation had to be discontinued. When she recovered from the chloroform, the pains returned, and the uterus was as firmly contracted round the child as before. The cord, however, was felt, and was pulseless. As the patient, in spite of the strong pains, was in a state approaching exhaustion, no opiate was given; but, the child being dead, the scissors-shaped perforator (Smellie's) was passed into the thorax through the axillary space, Both in attempting to turn and using the perforator, manipulation was very difficult, because the vagina was contracted and the pelvis rather narrow, although none of the previous labours had required the forceps. The presenting arm was a great obstacle to the free use of the perforator, greatly limiting the extent of the opening in the thorax, and had to be removed by disarticulation at the shoulder-joint, which was effected by means of a probe-pointed bistoury. After perforation, turning was still very difficult, and it was feared might prove dangerous to the patient from the frequency and severity of the pains, so I made an attempt to perform cephalic version. Passing a blunt hook into the mouth, I steadied this with the left hand, and slipping the fingers of the right hand over the child's forehead towards the vertex, endeavoured to bring the head down; but from the position of the child's body across the uterus, it would not come into position. I then tried to pass the lower blade of Beatty's forceps round the head, guiding it with the fingers of my right hand; but the blade was too short, and the only effect was to displace the head higher above the pubes. This, however, gave me now room behind, and passing up my left hand towards the fundus, I grasped the right foot between my finger and thumb just as a pain was coming on, during which I held it. I was unable to reach the knee; but by force, applied as cautiously as circumstances would permit, I gradually brought down the foot till a tape was slipped round the heel. After this I gave the patient a short rest, and then completed the labour without any further difficulty. There was no hæmorrhage.

Dr. Ewing Whittle, who assisted me in the management of this case, from the experience of more than four thousand confinements, had previously met with only two cases of turning which required the use of the perforator.

Yours &c.,

Liverpool, April, 1877. GLYNN WHITTLE, B.A., L.S.A.

M.R.C.S., L.R.C.P. Ed.—We agree in the opinion that if "the judgment of the Court" in cases of prosecution for illegal practice were widely known, unqualified men might be deterred from offending.

A CORRECTION.

To the Editor of THE LANCET.

SIR,—In your report of what I said in exhibiting my specimen of Aneurism of the Superior Mesenteric Artery at the Pathological Society, a somewhat serious error occurs. I am made to say that the patient was "at first refused admission" to the hospital. He was, on the contrary, urged to come in, but declined, at first, to do so. I shall be obliged if you will allow me to make this correction.

Your obedient servant,

Hertford-street, May-fair, April 6th, 1877. I. BURNEY YEO.

"WHAT LIGHT TO USE?"

THIS is a question of daily concern with housekeepers, and it is extremely difficult to answer in a way which in the long ran proves satisfactory. Gas is undoubtedly injurious to health of body and perfection of sight. The carbonised and sulphuretted atmosphere pervading rooms wherein gas is consumed—or more accurately half burnt—cannot fail to affect the throat and air-passages unfavourably, even if the mischief goes no further, which we fear too often happens. It is possible that the prevalence of pulmonary affections in the last half-century may be in some way connected with the extended use of gas in large workshops, places of public resort, and private houses. The vitiated air has also an irritating effect on the surface of the eye, if not on the organ itself. Most of the substitutes for gas for use in lamps are either dangerous, difficult of manipulation, uncleanly, or emit a disagreeable odour during combustion. Candles give a light intolerable after the use of gas, unless employed in numbers too great and costly for domestic purposes. What is to be done? Science has not yet furnished us with a cheap and practicable magnesium or electric light. The latter will probably be the light of the future. Would it not be worth while for inventors to concentrate their ingenuity on this last-mentioned agent of illumination, with a view to devise some method by which it might be applied in a diminutive form to the purpose of lighting apartments of small dimensions? It can scarcely be impossible that a luminous point of moderate size, capable of diffusion by properly adjusted reflectors, should be obtained without either excessive cost or insuperable difficulty. We fancy the apparent impracticability of the feat of ingenuity required is in great part due to the fact that the problem has not yet been attempted at close quarters, and on a modest scale.

Mr. Thos. Jackson.—The Siamese twins were male.

PROFESSIONAL DIFFERENCES.

To the Editor of THE LANCET.

SIR,—I am sorry for my own justification to be compelled to trouble you with a letter in reference to the above subject, arising out of an appointment of a medical officer for the Loughborough district of the Stow-on-the Wold Union. Had it not been for your editorial remark, I should have allowed the letter from Dr. Pearse to have remained unanswered.

I have always been most desirous, and especially so during the time the subject of the appointment had been pending, to uphold the etiquette and dignity of our profession; but in connexion with Dr. Pearse to achieve this it would be impossible in working together. I said I would not take the appointment for less than the salary Dr. Pearse asked. So far so good; but then Dr. Pearse immediately takes such a course as to get into bad odour with the guardians, so much so that on his applying for a testimonial they refused it. The guardians asked for a Local Government inquiry into a case in his district. Dr. Pearse resigned before such inquiry was held. There were two applicants for the appointment, who did not attend. Why? Was there any undue influence used? Dr. Pearse so far succeeded that the guardians could not make the reappointment, and then Dr. Pearse offered himself for reappointment; but the guardians, rather than reappoint him, agreed to rearrange the district, which matter is now pending. I quite agreed with Dr. Pearse that the district was badly paid; but between him and me this has nothing to do with the question. Under the circumstances, Mr. Hayward, my partner, who for forty years has been medical officer for the Stow district, was requested to meet the guardians, and consider the rearrangements of the districts. I attended for him, and conveyed the wish of Mr. Hayward that I should be appointed in his stead to the Stow district. To this district some of the parishes in the Loughborough district were added, the others going to Bourton, with the consent of Mr. Moore, the medical officer of the Bourton district, who was present, and to the rural Stow division I consented to act as medical officer, nothing being fixed about the salary then, and not even at the present time. I went out of my way by mentioning at that meeting that I should like to behave with all etiquette to Dr. Pearse, asking if he were quite out of the field, as I should not entertain it if such were not the case, thereby running the risk of offending many influential men, most of them feeling so hurt at Dr. Pearse's conduct that nearly all intimated they would not sit at the Board if Dr. Pearse were re-elected. Surely you cannot identify the proposed Stow district with the Loughborough district as held by Dr. Pearse. It was idle for Dr. Pearse to suppose that he could have so arranged as to force the guardians to give him the appointment.

I state positively I have done nothing that Dr. Pearse could fairly take exception to. Why, therefore, should he try by colourable statements to obtain satisfaction at my expense? If I had applied when the guardians advertised for a medical officer to the Loughborough district, the case would have been different; but only when they abandon the Loughborough district, and not until then, do I have anything to do with it, and then only taking the place of my senior partner.

May I ask is it etiquette or right to publish private letters before another word is passed between parties? Is it just for Dr. Pearse, after his resignation, to be vaccinating the paupers?

I remain, Sir, yours faithfully,

April, 1877. P. DOWNING HOPGOOD.

F.R.C.S. Exam.—The vacancy occasioned by the decease of Sir William Fergusson will not be filled up until the annual meeting of the Fellows of the College in July next.

S. S. should consult a surgeon in his own neighbourhood.

DIPHTHERIA.

To the Editor of THE LANCET.

SIR,—I have had recently several cases of diphtheria under my care, and shall be extremely obliged to any of your numerous readers who will kindly inform me of what has proved the most successful method of treatment in their hands. I have tried several plans. My adult cases have all recovered; but among the children I have lost a very large percentage.

I am, Sir, yours truly,

April, 1877. A YOUNG SURGEON.

TRACHEOTOMY TUBE WORN BY A HORSE.

A CASE is reported in the *Veterinary Journal* for April, as having been narrated by Prof. Walley at the annual meeting of the Scottish Metropolitan Veterinary Medical Society on Feb. 14th, in which, a horse having contracted throat disease, and giving evidence of difficulty of respiration, tracheotomy was performed, and a tube inserted. The animal for many weeks, it would appear, went through his daily work with the tube in his trachea—a fact which seems more creditable to the horse than, from a humanitarian point of view, to his owner. One morning, however, the animal was found dead; the tube had escaped, and could not be discovered. Prof. Walley believed death to have resulted from blood-clot in the bronchial tubes, though none could be detected at the post-mortem examination. The trachea at the site of the wound was greatly thickened and partly ossified.

Mr. Golding Bird's paper will be published next week if possible.

ON CURRENT MEASUREMENTS IN ELECTRO-THERAPEUTICS.

To the Editor of THE LANCET.

SIR,—I am somewhat surprised to read Dr. Tibbits' statement, that "a galvanometer may be a measurer of the strength of a current flowing from a battery, but it is no accurate gauge of the amount of this current actually administered to the patient." Surely Dr. Tibbits does not need to be told that when a galvanometer is included in a circuit closed by the human body, the needle will indicate the strength of current passing through the body precisely as though the circuit was closed by a resistance coil or a length of telegraph wire.

Dr. Tibbits correctly states that the amount of current administered to a patient largely depends upon the condition of the electrodes and the patient's skin; but he must pardon me for stating that he errs in giving this as the reason why a galvanometer cannot gauge the amount of current. Dr. Tibbits admits that a galvanometer will measure the current of a battery. Now, the strength of a current is equal in all parts of the circuit, and is governed by the resistance of the circuit; therefore, if the human body forms part of the circuit, the galvanometer will indicate *pari passu* the quantity of electricity passing through the body, in accordance with Ohm's law, $C = \frac{E}{R}$.

Dr. Tibbits' experiments with the different batteries are at variance with the results obtained by me in a prolonged series of investigations on current measurements in electro-therapeutics; the readings I obtained were very constant. I should like to ask Dr. Tibbits to repeat his experiments, not once or twice, but many times, and to kindly let me know the result.

My remark that in "nervous affections" no visible action is produced by the current, should read "some nervous affections"; when writing the sentence I was thinking of neuralgias, not of paralyses.

Yours truly,

Manchester, April 7th, 1877. J. DIXON MANN.

To the Editor of THE LANCET.

SIR,—Dr. Tibbits' letter in to-day's LANCET will astonish many of your readers. Besides containing one astounding mistake as to facts, it fails to give satisfactory proof of what its author advances.

1st. "A galvanometer may be a measurer of current flowing from the battery, but it is no accurate gauge of the amount administered to the patient." This statement simply takes the breath out of anyone conversant with the outlines of electrical science. The very foundation of the idea of a current implies that it is equal at every point of the circuit.

2nd. The observations adduced with regard to the defections given by currents purporting to be physiologically similar, have evidently been made far too hastily to carry conviction into any mind accustomed to the scientific precision of experimental methods.

3rd. Dr. Tibbits' constant recurrence to the production of muscular contraction will be best met by taking a counter-example. The utmost confusion and uncertainty reign in the recorded cases of aneurism treated by electrolysis. This depends in a very large measure upon the total absence of recording instruments in such operations. Here we have to do solely with the chemical effects of the current, and these are unerringly measured by the voltameter or galvanometer. No real progress will be made in medical electricity until we possess a proper system of measurement.

I am, Sir, yours faithfully,

A. DE WATTEVILLE, M.A. Lond., &c.

Old Cavendish-street, April 7th, 1877.

"CARBONIC ANHYDRIDE."

A CORRESPONDENT writes to ask us "if carbonic anhydride can be obtained either naturally or chemically for examination," remarking that he does not find it mentioned by writers on Therapeutics or Chemistry." As the compound in question is the old familiar carbonic acid gas, and nought else, renamed by Gerhardt some scores of years ago, our friend may gratify his desire without any great expense. A druggist once confessed to us that he had made a tolerable profit by selling protoxide of hydrogen to a customer who asked for it, and who evidently took it for a rare compound.

INCISING THE PERIOSTEUM.

To the Editor of THE LANCET.

SIR,—With reference to the above operation mentioned by your correspondent, Mr. Moxhay, of the Royal Berks Hospital, allow me to state it is an operation which has been performed by the veterinary profession for many years past, and was first recommended by the late Professor Sewell. During the last twenty-five years I have performed the operation of periostiotomy upon hundreds of cases of splint lameness with very great success. I consider it the most speedy cure for cases of this kind. I find the only difference between the plan recommended by Mr. Moxhay and that practised by veterinary surgeons is, that we generally place over the exostoses a seton after dividing the periosteum.

Yours faithfully,

HARTLEY T. BATT, M.R.C.V.S.

Veterinary Infirmary, North-row, Grosvenor-square,

April 9th, 1877.

TREATMENT OF ENTROPIUM.

In a recent report by the Surgeons of the National Eye and Ear Infirmary, Dublin, the treatment of entropium and trichiasis by Dr. Berlin's method is spoken of in satisfactory terms. As this operation is not generally known, a description of it may be of interest to our readers. A horn spatula having been inserted under the lid by an assistant, so as to protect the eyeball, or, still better, a Knapp's clamp having been applied, an incision is made extending the entire length of the lid, about three millimetres from its margin. This incision divides at once the skin, muscle, cartilage, and conjunctiva. The skin and muscle along the upper edge of the wound is now to be pushed up with the handle of the knife, or dissected up, so as to expose the cartilage. The cut edge of the latter is then seized at its centre by suitable forceps, and with a scalpel or scissors a narrow oval piece, extending the whole length of the cartilage, and from two to three millimetres in extent at its broadest part, is excised. A portion of conjunctiva corresponding in size to the bit of cartilage removed, must necessarily be taken away with it. A piece of skin along the upper margin of the wound may then be excised if it be feared that the effect will be insufficient; and finally, the lips of the wound may be closed with three or four points of suture, or a bandage used instead of the sutures. An objection has been made to this operation, that it is liable to produce lagophthalmos and imperfect lubrication of the margin of the eyelid, in consequence of the injury to the Meibomian glands, but in practice such a result has not occurred. The operation is stated to be simple, rapidly performed, and to leave no disfigurement.

THE INDIAN MEDICAL SERVICE.

To the Editor of THE LANCET.

SIR,—I was glad to observe the statement in your issue of the 17th inst. that a memorial has been drawn up for the purpose of representing to the Marquis of Salisbury the disadvantages of the Indian Medical Service; but I have no sympathy with any complaints about the depreciation of the rupee or the inadequate pensions. The depreciation of the rupee is not the fault of the Indian Government, and does not affect the Medical Department especially, and the pensions received by medical officers are such as were promised on their entering the service. I do not look upon these two points as disadvantages of the service; but will, if you will allow me, point out the real disadvantages of the Indian Medical Service which afflict the department generally (especially juniors), and for which the Indian Government is solely responsible; for I can show that nearly every clause in the Schedule, under the provisions of which surgeons enter the service, has been broken. There are two scales of military pay mentioned in that Schedule—viz., the unemployed and the regimental. Take the case of a young surgeon who has just gone to India. His unemployed pay is 296 *r.*, and his regimental pay 450 *r.* a month. He naturally thinks that when he has passed the Lower Standard in Hindustani, and is put in sole charge of a regiment, he will get 450 *r.* a month; but, to his amazement, he finds there is a third scale of pay, called officiating pay (not mentioned in the Schedule), which is a varying sum, but may be said on the average to be about half way between the unemployed and the regimental pay—i. e., in the case of a junior surgeon, about 369 *r.* a month. It is hopeless for me to make you or your readers in the short space of a letter understand the intricacies of the officiating system; but suffice it to say it is spoken of indignantly by the whole medical department of India. The present surgeon-general of the Bengal Presidency for the first six months he was in office received (owing to the working of this system) 1200 *r.* per mensem instead of 2700 *r.*; in fact, 600 *r.* a month less than his own deputy. I have heard deputy surgeon-generals (who were unaffected by this system, as it was introduced after they were promoted) speak of it as a very reprehensible measure. One deputy surgeon-general, an officer well known for the support he always accorded to the views of Government, used these words to me: "The Government will never be induced to give it (the officiating system) up; it is too profitable." Another deputy surgeon-general told me that the pretence on which the officiating system was introduced into the medical department was a very flimsy one. A surgeon may be many years before he receives his full military or staff pay; for there are men in the service of eight years' or more standing who are still holding only officiating appointments—i. e., doing the entire duty of the appointment, and not receiving the entire pay. I have now a letter in my possession from a surgeon of nearly six years' service, saying that for his regimental charge he gets only 386 *r.* instead of 600 *r.* It may be said that the leave allowances are a set off to the profit thus made by the Government; but it is easy to show that the Government takes much more than it gives. I quote here the first impressions of a young surgeon, whose letter I have by me. He speaks thus of the officiating system: "A system admitted by all to be a breach of covenant on the part of Government, and a source of dissatisfaction to the members of the service. There is no doubt that if men at home only knew the condition of things here, they would not so easily be got to sacrifice moderate prospects at home, and enter upon service in a country fraught with so many dangers to health and life," &c. Another extract from the letter of a young surgeon: "Government gets men out by offering conditions which they do not carry out, and trust to their position of might."

One hears a good deal about the advantages of civil employ, but very little about the disadvantages. Here also the officiating system obtains, and, bar professional experience, the only advantage is that (in an ordinary second-class civil station) one's receipts are about 150 *r.* a month more than in a regiment, but earned at such a cost that many will not submit to it. In this 150 *r.* I have included the superintendence of a gaol at 100 *r.* I give you a few extracts from the letter of a surgeon who held what he himself styles "a so-called good civil employment": "The civil work in these provinces does not pay, and is far from agreeable." "Without a civilian's salary it is impossible to exist; with a civil surgeon's pay one cannot exist." "Duties in some respects unprofessional, and occasionally most repulsive." "Your allowances are so small that you may be the worse paid official in the station." "I know of no more ignominious employment than that of civil surgeon." "Has to bear snubs from magistrates." He speaks of the duties of an ordinary civil station as a "deep indignity and professional degradation." The private practice in a second-class civil station is to a great extent a myth, not exceeding 100 *r.* a month. Most civilians pay the civil surgeon very unwillingly, and I could give extracts from medical officers' letters showing this; but the expressions are mostly so bitter on the subject that I forbear. I give you one more extract from a civil surgeon's letter: "In a native regiment you may still be a gentleman, and have the chance of society and a fair station; but in a petty civil station there is neither," &c. It is not a pleasant thing for a civil surgeon on a burning day to go to a magistrate's court (the magistrate himself perhaps only an assistant, and quite a youth), and wait in a comfortless furnace of a court, without a punkah, until his mightiness chooses to appear. This is a frequent occurrence. Neither is it pleasant leaving one's bungalow to go out into a temperature of 115° in the shade and 170° in the sun to make a post-mortem examination. These are some of the pleasant duties of a civil surgeon. I believe I am right in saying that a civil surgeon is the only European officer (of commissioned rank) in the employ of the Indian Government that, in the execution of his duty, can be summoned to the court or the house of a native official.

I fear I am trespassing too much on your space, and will therefore only mention a few more acts of the Indian Government to its medical officers without commenting thereon.

The reorganisation of the gaol pay. This was in effect an economy to the Government, and therefore a loss to the medical department. Nearly all the superintendents of gaols are medical officers.

Other appointments exist allied to regiments (such as forts &c.), the full pay of which is less than 450 *r.*, but are not mentioned in the published Schedule.

Recently the pay of surgeon-majors in the civil department has been adapted to the new scale, which did not refer to them. This in all second-class civil stations amounts to a deduction from the pay of these officers of from 39 *r.* to 143 *r.* a month, according to their seniority.

Attacks have been made on the promotion guaranteed after twelve years' service and on widows' pensions.

I maintain that equitably and inferentially the Indian Government has not the right to make a surgeon (who has passed the Lower Standard) do a single day's duty under 400 *r.* a month in civil employ, and 450 *r.* in military, instead of which they are sent all over the country on the most unpleasant duties, such as assisting during cholera epidemics, and receive only unemployed pay. I have known a surgeon to be doing the duty of two appointments, and I may say even three, at the same time, and yet restricted to unemployed pay.

Many of the disadvantages of the service would be removed if the following points were observed:—Let appointments (not being special) be given to the most senior men. Let it be understood that unemployed pay is a sort of subsistence money for those actually doing nothing. This is what it was originally established for. Let medical officers retain their appointments when going on leave, but do not let them retain the pay also. That an officer holding a substantive appointment shall not be allowed to officiate in another without abandoning the one he holds. Let it be understood that the officer who does the duty receives the pay. Let the duties of a civil surgeon be more defined, and let his native assistant do more of the work as concerns natives, especially the giving of evidence in trivial cases.

I am sorry to have troubled you with so long a letter; but I have been as brief as possible. Even now all mention of several points is omitted. As I before said, I have no sympathy with the memorialists, as they have not touched the real grievances of the department; and I think your correspondent, "Primus in India," is, judging from his letter, an officer of the Queen's army, who desires the amalgamation of the two services, as he hopes for employment under the Indian Government. If I am right, I am sure he would regret the gratification of his wish. I only wish I could exchange with him, and be transferred to the British service, as I would willingly do so. This suggests to me that it might be wise to allow exchanges, as it would be a step on the road to an amalgamation of the two services. There seems no evident reason why it should not be so arranged, as the education of the medical officers of the two services is the same.

Yours sincerely,

March, 1877. VOL.

R. H. B., (New Zealand.)—Our correspondent's comments are rather too severe. Cases sent to us generally err in being too diffuse, rather than too concise. When no remarks are made as to the patient's bowels, urine, skin, &c., "R. H. B." must assume that they differed in no way from the ordinary condition in such a disease.

Mr. H. Worsley is thanked.

THE SINGLETON DISTRICT OF THE WEST HAMPSHIRE UNION.

To the Editor of THE LANCET.

SIR,—Will you kindly insert these few lines in your next number? I have resided in this district nearly four years, during which period nearly the whole of its parochial duties have devolved on me, owing to the increasing years of its late medical officer. Shortly after tendering his resignation, which he did a few weeks ago, an advertisement appeared in THE LANCET and *West Sussex Gazette* for another medical officer for this district. I, with two others, applied for the appointment, myself being the only one of the three residing in the district, living almost at its central point. Much to my surprise and disgust, the guardians thought proper to appoint a medical man from Chichester, and who resides, and will continue to do so, nearly two miles beyond the extremity of the district, and who had considerable influence with the guardians. I can only say, if the Local Government Board lay down rules to be carried out and allow the guardians totally to ignore them, it is high time we had an alteration; for, as things at present stand, the guardians take the law entirely into their own hands, setting the Local Government Board at defiance.

I am, Sir, yours, &c.,

E. C. BIRT, L.F.P.S.E., L.M., L.S.A.

Singleton, near Chichester, April 10th, 1877.

ANGLO-AMERICAN SANATORIUM IN ROME.

FOR two reasons an English home for visitors is greatly to be desired in the Eternal City. In the first place, many invalids who come to Rome for change of air and scene would be saved an expenditure which, if not actually prohibitory, greatly abbreviates their sojourn. In the second, those visitors who fall ill would find in it a more certain aid to recovery than in the hotels or private apartments they have hitherto had to put up with. Such a home it is now proposed to start in October next on the following principles: 1st, to be completely unsectarian; 2nd, to have a weekly rate of payment fixed on the most moderate scale compatible with comfort; 3rd, to form as cheerful and sociable a residence as possible. A private hospital will be an entirely separate part of the institution for cases of severe illness. These will be accommodated and nursed in private rooms at special fixed rates of payment. Trained English nurses will be attached to the Home, and take charge of the cases under medical supervision. Such institutions are in working at Mentone, Florence, and Cairo, and the one now contemplated in Rome begins with every prospect of success. The British Ambassador and the American Minister are its patrons, and the lady superintendents are Miss Pearson and Miss M'Laughlin, whose great hospital experience in France, and more recently in Servia, is a guarantee for the effective nursing and general sanitary efficiency of the establishment.

Omega.—Parkes's work on Hygiene; Wilson, and Reports of Local Government Board.

LUNACY LAW REFORM.

To the Editor of THE LANCET.

SIR,—Now that a Committee of the House of Commons is investigating the Laws of Lunacy, would it not be a good time for the heads of our profession to bring before that Committee the very uncertain *locus standi* of all medical superintendents?

You are aware that by the 57th section of the Lunatic Asylums Act, 1853, it is enacted that "it shall be lawful for any Committee of Visitors, if *in their discretion they think fit* so to do, to grant a superannuation not exceeding two-thirds of the salary then received by the superintendent"; and by the 12th section of the Lunacy Acts Amendment Act, 1862, it is added "that regard may be had, *if the Visitors think fit*, to the value of the lodgings, rations, or other allowances enjoyed by the person superannuated"; and then it adds "that no such annuity shall be payable out of the rates of the county until it be confirmed by a resolution of the justices of quarter sessions."

Now all this leaves the superintendent in great doubt and uncertainty, and this, I maintain, should never exist. We ought to know for a positive fact, if we continue in our office for the period allotted to superintendents, that our annuity will be sure to us, and no magistrates ought to be able to withhold their confirmation when the annuity is granted by the Committee of Visitors. Indeed I would say it is placing a medical man in a very humbling position, after a long period of service to the county, to know that he must appear before the Quarter Sessions, and run the risk of having his annuity not confirmed, and that, too, most probably by a number of young and utterly inexperienced magistrates, who really, when the superintendent began and ended his professional career, were hardly old enough to qualify for their seat in the sessions, and certainly far from fit to be the judge of the value of an old and faithful county servant.

Sir, to whom ought we to look for help but to those lucky men now at the head of our branch of the profession? Doubtless they worked well, and now reap their due reward; and as rewards such as theirs are very few and hard to obtain, let them not remain in indifference to those who are obliged still to work, but try, now an opportunity offers, to impress on any M.P. on that Committee the necessity of a great and positive change in the law of superannuation.

You, Sir, have it in your power to help. Were you ever asked to help in vain? I say, No.

Pardon my thus troubling you, and believe me with great respect,

April, 1877. A MEDICAL SUPERINTENDENT OF FIFTEEN YEARS' STANDING.

A Subscriber.—By 25 and 26 Vict., c. 3, s. 22, the fortnightly visit to be paid by a physician, surgeon, or apothecary to single patients is rendered unnecessary, in the case of a person found lunatic by inquisition. The medical man in charge of the patient must, however, make an entry in the "medical journal" every two weeks, and the visiting physician must on the 10th of January, or within seven days of that date, every year, report in writing to the Commissioners in Lunacy. As there is no express direction in the Act how often the patient should be visited, and it is inconceivable that the Legislature contemplated visiting only once a year, the physician should address a letter to the Secretary of the Commission, asking for instructions. Appendix I. is not explicit, and deserves reconsideration by the Commissioners.

PRESCRIBING CHEMISTS.

To the Editor of THE LANCET.

SIR,—I have noted with interest your annotation on this subject, *apropos* the recent conviction of a chemist at Nottingham for infringing the Apothecaries Act. Now that the offence has been clearly defined by the Judge, and the penalty enforced, let us hope that the Medical Defence Association will be unremitting in their efforts to suppress this long-standing opprobrium of our profession, and put a stop to this poaching upon the preserves of legally qualified men. I doubt not almost every practitioner in a large town could point out one or two offenders of this kind. I can at least point out to the Secretary of the Association a homœopathic chemist, who not only prescribes over his counter and his "consulting-room," but visits patients in and out of town, and does a practice as large and remunerative as nine of ten medical men in a town of upwards of 50,000 inhabitants.

Your obedient servant,

April, 1877. NE SUTOR ULTRA CREPIDAM.

METHOD OF ESTIMATING UREA.

AT a meeting of the Medical Society of the College of Physicians, Ireland, held last week, Professor Emerson Reynolds demonstrated a ready method of clinically estimating the quantity of urea in urine. In the apparatus, which is very simple, to a given quantity of urine mixed with water, the hypobromide of soda is added, and the water displaced by the volume of nitrogen given off indicates the amount of urea present in the specimen examined; every six and a half drachms of water discharged being equivalent to one grain of urea.

Mr. Moore, (Cann.)—The practice to which our attention has been called shall be noticed next week.

ANIMAL VACCINE LYMPH.

To the Editor of THE LANCET.

SIR,—Knowing the unfailing interest which your excellent journal always takes in matters of public hygiene, and in a regular system of animal vaccination in this country, as successfully carried out at Brussels under the direction of our distinguished *confrère*, Dr. Warlomont, I venture to hope the following case of successful calf vaccination may not be unworthy a place in your columns, notwithstanding the difficulties which have been experienced by many medical men in this country in their attempts to vaccinate the calf successfully.

My first attempt to vaccinate the animal with liquid lymph, which I obtained direct from Dr. Warlomont, of Brussels, and used according to his instructions, has been attended with perfect success. Encouraged by this success it is my intention to keep up a regular supply of the animal vaccine, which, with the advantages of a rich agricultural district, regular supply of animals, and the able assistance of a scientific stock farmer in the neighbourhood, I trust I shall be able successfully to carry out. The pustules were eleven in number, extending over a space between the inguino-mammary region and umbilicus. My method of vaccinating differs from that practised by Dr. Warlomont. I usually make from seven to ten punctures with the lancet, in each place promptly introducing the liquid lymph (which is always held on a spatula in the left hand), a slight scratch with the point of the lancet concluding the operation. On the third day each place exhibited a red edging, enclosing a slightly indurated surface; this increasing rapidly in size, and ending on the fourth day in vesicles of a silvery-white appearance. At the beginning of the fifth day I removed the contents of four vesicles, according to Dr. Warlomont's method, thus charging 110 points and preserving some of the scab. On the day following I charged 180 more, in all, with what I obtained the following morning, making over 400 points, exclusive of some preserved on glass and scab.

I remain, Sir, your obedient servant,

Alton, April, 1877. THOMAS WILSON, Medical Officer of Health, &c.

BRIGHT'S DISEASE: MUSCULAR SCLEROSIS.

To the Editor of THE LANCET.

SIR,—In connexion with the subject (arterio-capillary fibrosis) lately under discussion at the Pathological Society, the following case may interest the readers of your journal.

Some time since I was called to a neighbouring town to advise under the ensuing circumstances.

J. G——, aged forty-six, tailor by trade, and a bandmaster in a Rifle Volunteer Company. Medium height; face pale, and pock-marked. He has played a great deal on large wind instruments. Has noticed for some years a progressive shortness of breath, with constant pain in the walls of the chest, aggravated by inspiration. With this the legs have been observed to swell; they pit deeply under pressure. The patient sits all day bolstered up in arm-chair. This is his easiest posture.

Physical examination.—I find considerable general anasarca; a peculiar scleroma of the pectorales and the serrati magni. There is general lobar emphysema; but I can detect no cardiac disease beyond the inevitable tricuspid regurgitation, and right dilatation of emphysematous subjects. The urine was deficient in colouring matter, loaded with albumen, but never at any time were casts discernible.

Remedies did little for this unhappy sufferer, who died in a few months of anæmic exhaustion.

Unfortunately a post-mortem examination was not permitted.

Yours truly,

April, 1877. EDWARD T. BLAKE, M.D.

A MEDICAL CORONER'S PARTNER.

To the Editor of THE LANCET.

SIR,—Will you kindly tell me whether a medical man, coroner for a district, is legally or by professional etiquette justified in summoning his partner to give evidence at an inquest on a case which he (the coroner) had attended, his partner not having seen it before death? And, again, is he justified, in a town where there are other medical men, in ever calling his partner to give evidence in cases that have died without medical attendance?

The following instances have recently occurred:—The coroner, as doctor, was called to a man dying of tetanus. He visited the patient, and the man died the same day. His partner attended the inquest, though he had never seen the case. Again, a child in a neighbouring village was overlain by its mother. The family attendant was at once sent for. The messenger met the coroner, who told him there was no need to go on for the doctor, as the child was dead. The coroner then held an inquest, and summoned his partner, not the family attendant, to give evidence.

Yours faithfully,

April, 1877. CERBERUS.

*** The question raised is one of taste rather than law. It would be hard for a coroner's partner to be objected to as a witness in ordinary circumstances; but obviously the coroner should be above all partiality, and should certainly not prefer his own partner as a witness to the ordinary medical attendant in such a case as the second of the above.—ED. L.

COST OF HORSES IN TOWN.

To the Editor of THE LANCET.

SIR,—I have been much interested in the correspondence relating to the cost of horses in the *country*. Perhaps it may not be out of place to put before my professional brethren in the country what it costs me annually to keep two horses in *town*. The discrepancy between the two will appear somewhat extraordinary, and I shall only be too glad of any suggestions as to how the said expenses could be reduced. I may add that I have a relative in practice at the West-end, who tells me that the cost of his horses is about the same as my own, and further assures me that *they cannot be kept for less*, in good condition—at all events, in London.

39 quarters of Riga oats	£50	14	0
4 loads 12 trusses of hay	29	18	0
5 loads 28 trusses of straw	16	4	0
26 cwt. of chaff	11	1	0
52 bushels of bran	2	12	0
104 quarts of linseed	1	6	0
	£111	15	0

Faithfully yours,
April 10th, 1877. A LONDON PRACTITIONER.

THE EFFECTS OF CHLORAL.

To the Editor of THE LANCET.

SIR,—In reply to your correspondent, writing under this heading in your issue of March 31st, I think perhaps my own personal experience of the drug may interest him. In order to get sleep, I have been compelled to resort to chloral, no other medicine being of any use, and I have taken it in scruple doses every night on going to bed for upwards of four years, without, so far as I have been able to discover, any bad consequences whatever. In my practice, which is an extensive one, I use the drug very often, and cannot say that I have noticed that it affects the brain in any way.

Yours &c.,
April, 1877. M.D.

MORPHIA FEVER.

To the Editor of THE LANCET.

SIR,—I should esteem it a favour if some of your correspondents would state their experience of this disease: the symptoms, treatment, together with the results. It would be interesting to know the length of time the drug has been used before causing disturbance to health, what the dose has been in each case, and whether taken invariably by subcutaneous injection.

Yours faithfully,
April, 1877. M.R.C.S.

ULCER ON THE TONSIL.

To the Editor of THE LANCET.

SIR,—In answer to "General Practitioner" (A Hint Wanted), in THE LANCET of Feb. 24th, I would suggest that he apply iodoform with a camel-hair brush twice a day, and give your readers the result.

Yours &c.,
Boston, U.S., March 24th, 1877. E. D. SPEAR, M.D.

COMMUNICATIONS, LETTERS, &c., have been received from—Mr. Jas. Lane, London; Dr. Burney Yeo, London; Dr. Morell Mackenzie; Dr. Smiles, London; Right Hon. Earl Cowper, London; Mr. J. F. Smith, London; Dr. Colan, R.N.; Dr. Sanger, Birmingham; Mr. de Watteville, London; Mr. Clinker, Yeovil; Mr. Firth, Torquay; Mr. Benison, Canonbury; Dr. Bernard, Malta; Dr. More, Rothwell; Dr. Spear, Boston, U.S.A.; Mr. King, Melksham; Dr. Bakewell, Dunedin; Dr. Thomson, Westgate; Mr. Anderson, London; Mr. Worsley, Manchester; Mr. Batt, London; Dr. Lewis, South Kensington; Mr. Venman, London; Mr. Mann, Manchester; Mr. Manson, Chesterfield; Mr. Treves, Wirksworth; Mr. Beggs, Liverpool; Mrs. Rothery, Cheltenham; Mr. Bonthron, London; Dr. Craig, Bedford; Mr. Burdett, Greenwich; Mr. Schafer, London; Dr. Gordon, Salisbury; Mr. Lingard; Dr. Gairdner, Glasgow; Dr. Willmott, Weston-super-Mare; Mr. Hopgood, Stow-on-the-Wold; Dr. Maclagan, Glasgow; Mr. Armstrong, Newcastle-on-Tyne; Mr. Pope; Dr. Mason, Newcastle-on-Tyne; Dr. Wooler, Darlington; Dr. Wilson, Salisbury, U.S.A.; Mr. Birt, Singleton; Mr. Groves; Dr. Tompsett, Jamaica; Mr. Foster; Mr. Cann, Dawlish; Mr. Chater, Norwich; Mr. Bailey, Stourbridge; Mr. Fisher; Dr. Peele, Dublin; Mr. Bolton; Dr. Denny, Stoke Newington; Mr. Reid; Mr. Davies; Dr. Strange, Worcester; Dr. Scott, Hyères; Mr. Isles; Mr. Heather Bigg; The Registrar-General of Edinburgh; L.R.C.P.E.; G. S.; Veritas; J. V. R. C.; M.D.; Inquirer; M.R.C.S. and L.R.C.P.; Hants; L.R.C.P.L.; R. B. W.; C. R. E.; J. P.; J. C.; Ozone, Malton; Medicus, Thornton; J. C.; H. H. J.; &c. &c.

LETTERS, *each with enclosure*, are also acknowledged from—Mr. Wilmshurst, Chichester; Mr. Martin, Crawley; Mr. Birley, Manchester; Mr. Langston, Poplar; Mr. Evans; Mr. Greene; Mr. Nicholas, Shipdham; Mr. Martin, Walkden; Dr. Platt, Oldham; Dr. Harding, Whittlesea; Dr. Rowell, Corbridge; Dr. Hay, Bridport; Dr. Smith, Coxwold; Mr. Jackson, Bristol; Mr. Taylor; Mr. Browne; Mr. Smith, Brighton; Dr. Bothwell, Bewgley; Dr. Caton, Liverpool; Mr. Dean, Whitwell; Assistant; A. B., Holborn; E. S. C., Worcester; M.R.C.S.; Medicus; W. H. C., Newtown; Rusticus; Romik, Grays; X. Y. Z., Leicester; W. W., Brymbo; J. W. S.; X. Y. Z., St. Leonards-on-Sea; Bucks; S. V. P., Deal; H. B., Belfast; E. A.; Gamma, Hadleigh; Alpha, Wirksworth; Doctor, Bradford; D. S.; Subscriber; M. A., Deepcar; T. S. G., Brighton; M.D., Weymouth; H. J. P.; Victor; M.R.C.S., Keighley; W. H.; K. C. B., Liverpool; T. H. M., Crawley

New York Medical Record, Touchstone, Shield, Boston Medical and Surgical Journal, Buxton Weekly News, Surrey Advertiser, Sanitary Inspector, Colonies and India, Carlisle Patriot, Doctor, Derby Mercury, and *New York Sanitarian* have been received.

METEOROLOGICAL READINGS

(Taken daily at 9 a.m. by Steward's Instruments.)

THE LANCET OFFICE, APRIL 12TH, 1877.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Wet Bulb.	Dry Bulb	Solar Radia. in Vacuo	Max. Temp. Shade	Min. Temp.	Rain-fall	Remarks at 9 A.M.
April 6	29·48	S.W.	45	49	...	54	42	0·06	Cloudy
" 7	29·67	S.W.	46	49	...	56	40	0·01	Cloudy
" 8	29·68	S.W.	47	50	...	55	41	...	Cloudy
" 9	29·54	S.E.	40	50	...	57	46	0·20	Overcast
" 10	29·51	N.	40	51	...	59	48	0·70	Cloudy
" 11	29·64	S.W.	40	51	...	57	46	...	Cloudy
" 12	30·06	S.E.	40	44	...	63	38	0·17	Cloudy

Medical Diary for the ensuing Week.

Monday, April 16.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M each day, and at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M. each day and at the same hour.
ST. MARK'S HOSPITAL.—Operations, 9 A.M. and 2 P.M.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
MEDICAL SOCIETY OF LONDON.—8½ P.M. A Clinical Discussion: Cases by Dr. Crisp, Dr. Purcell, Mr. Francis Mason, and Mr. William Adams.

Tuesday, April 17.

GUY'S HOSPITAL.—Operations, 1½ P.M., and on Friday at the same hour.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 3 P.M.
ROYAL INSTITUTION.—3 P.M. Prof. Gladstone, "On the Chemistry of the Heavenly Bodies."
STATISTICAL SOCIETY.—7½ P.M. Mr. Frederick Martin, "On Births, Marriages, and Deaths, and the Comparative Growth of Population, in the principal States of Europe."
PATHOLOGICAL SOCIETY OF LONDON.—8½ P.M. Dr. Klein: Specimens illustrating the Minute Anatomy of Scarlatina; Specimens illustrating an Experimental and Anatomical Inquiry into the so-called Pig-typhoid. Dr. Braidwood: Contribution to the Intimate Pathology of Contagion. Mr. Barker: Unusually Large Vesical Calculi. Dr. Felix Simon: Aneurism of the Thoracic Aorta.—Microscopical Specimens on view at 8 P.M.

Wednesday, April 18.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at 1½ P.M.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at the same hour.
LONDON HOSPITAL.—Operations, 2 P.M.

Thursday, April 19.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and on Friday at the same hour.
ROYAL INSTITUTION.—3 P.M. Prof. Tyndall, "On Heat."
SOCIETY OF ARTS.—8 P.M. Chemical Section: Mr. Chas. W. Vincent, "On Spontaneous Combustion in Factories and Ships."
HARVEIAN SOCIETY.—8 P.M. Mr. Herbert Page, "On the Thermometer and Clinical Exactness."

Friday, April 20.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
MEDICAL MICROSCOPICAL SOCIETY.—8 P.M. Mr. C. H. Golding-Bird, "On "Double Staining with Indigo-Carmine and Carmine."
ROYAL INSTITUTION.—9 P.M. Mr. F. Pollock, "On Spinoza."

Saturday, April 21.

ROYAL FREE HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—3 P.M. Rev. A. H. Sayce, "On Babylonian Literature."

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